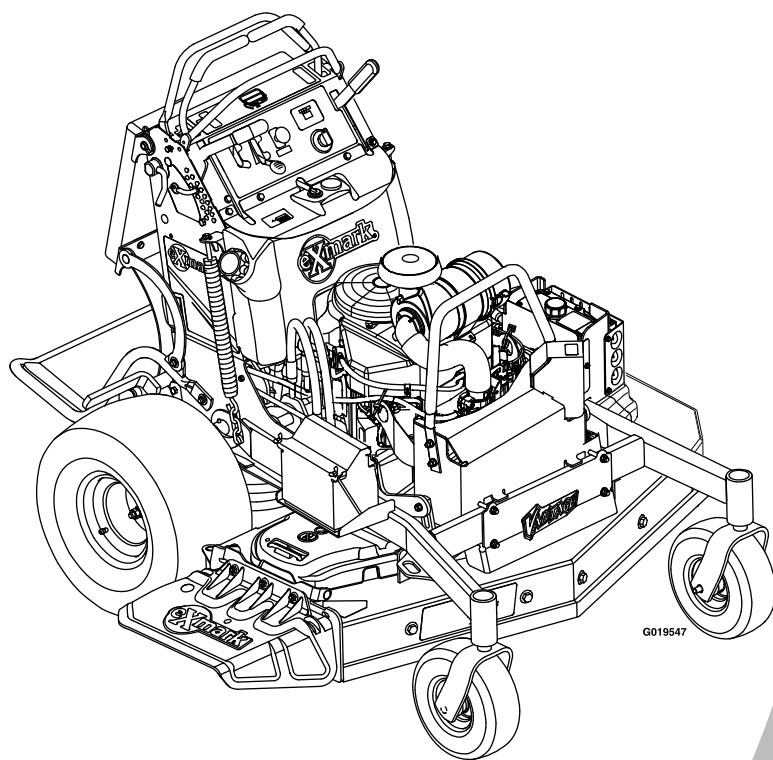




# **VANTAGE® S-SERIES**

Model No. VTS651KA484—Serial No. 313000000 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>HJ:</b> hex jam                             | <b>PRH:</b> phillips round head          |
| <b>ASM:</b> assembly                         | <b>HLH:</b> hex lag head                       | <b>PTH:</b> phillips truss head          |
| <b>BBC:</b> blade brake control              | <b>HOC:</b> height-of-cut                      | <b>PTO:</b> power-take-off               |
| <b>BHTF:</b> button head thread forming      | <b>HSBH:</b> hex socket button head            | <b>RH:</b> right hand                    |
| <b>CARR:</b> carriage                        | <b>HSFH:</b> hex socket flat head              | <b>ROPS:</b> roll-over protection system |
| <b>CCW:</b> counter clockwise                | <b>HSH:</b> hex socket head                    | <b>RRB:</b> rear roller brush            |
| <b>CW:</b> clockwise                         | <b>HWH:</b> hex washer head                    | <b>SFH:</b> slotted fillister head       |
| <b>DEG:</b> degrees                          | <b>HWHTF:</b> hex washer head thread forming   | <b>SHH:</b> slotted hex head             |
| <b>DPA:</b> Dual Point Adjustment            | <b>HYD:</b> hydraulic                          | <b>SHWH:</b> slotted hex washer head     |
| <b>ECM:</b> electronic control module        | <b>LH:</b> left hand                           | <b>SPH:</b> slotted pan head             |
| <b>EXT:</b> external                         | <b>LP:</b> Liquefied Petroleum Gas             | <b>SQH:</b> square head                  |
| <b>FH:</b> flat head                         | <b>LPG:</b> Liquefied Petroleum Gas            | <b>SRH:</b> slotted round head           |
| <b>GA:</b> gauge                             | <b>NI:</b> nylon insert                        | <b>STD:</b> standard                     |
| <b>HD:</b> heavy-duty                        | <b>NPTF:</b> national pipe thread fine         | <b>TAP:</b> self tapping                 |
| <b>HF:</b> hex flange                        | <b>PFH:</b> phillips flat head                 | <b>TTH:</b> torx truss 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 |                                                |                                          |

# Touch Up Paint

Exmark black touch up spray paint – gloss black.

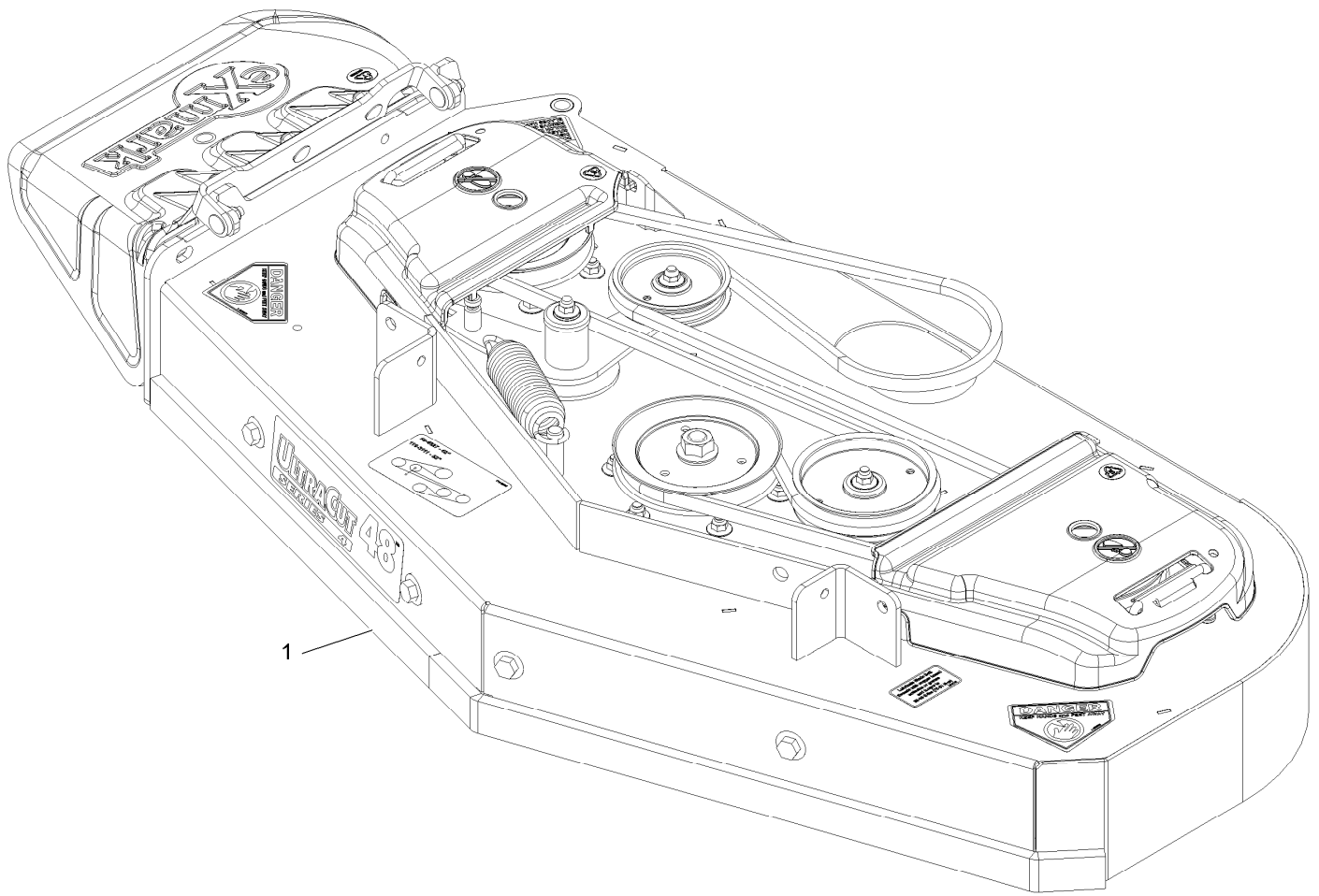
Exmark red touch up paint (spray paint – P/N 1-850337 - .6 oz liquid bottle – P/N 103-9140).



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.)

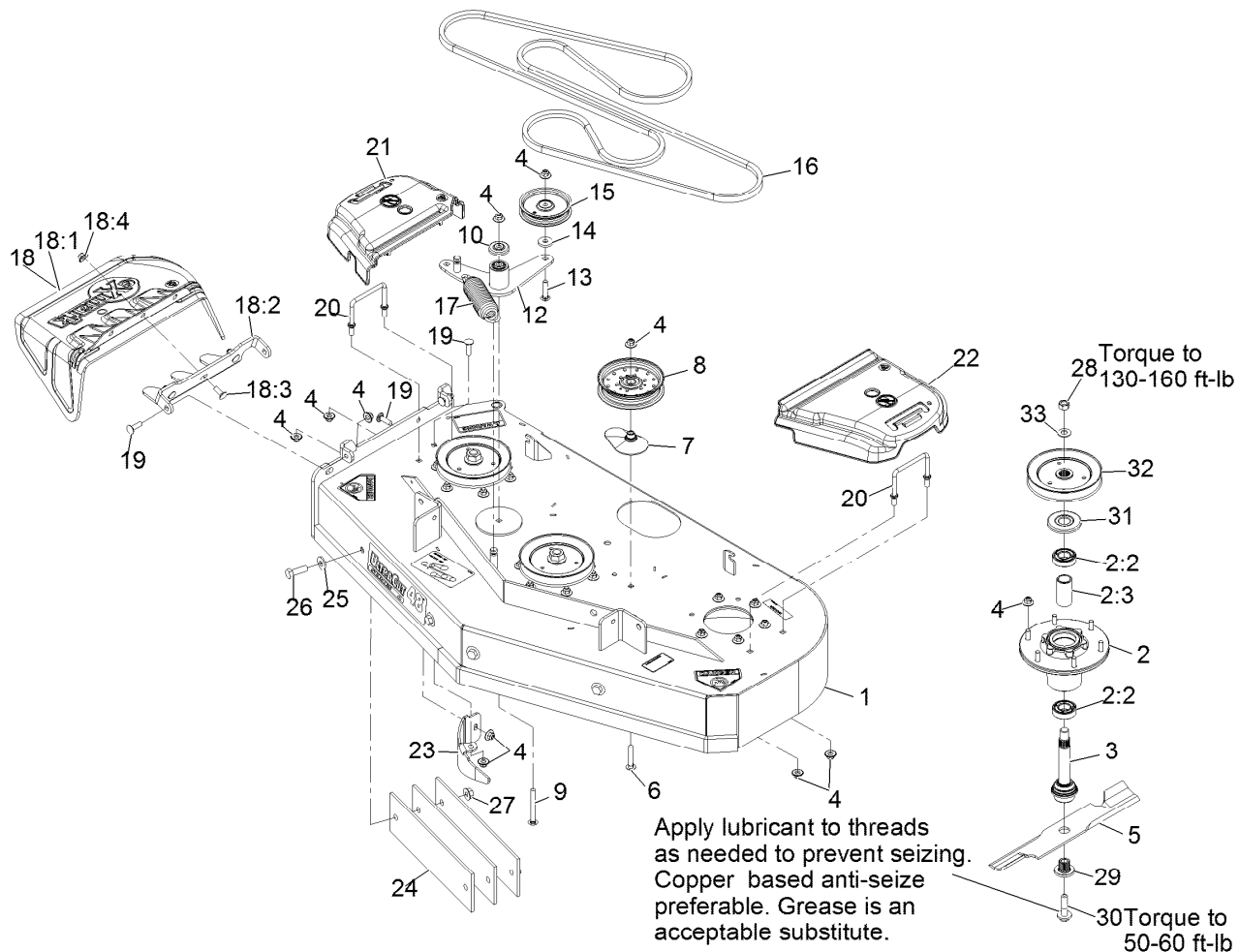
## Contents

|                                                        |    |
|--------------------------------------------------------|----|
| Complete Deck Assembly.....                            | 4  |
| Deck Assembly.....                                     | 5  |
| Deck W/Decals Assembly No. 116-3999.....               | 6  |
| Idler Arm Assembly No. 116-3806.....                   | 7  |
| Main Frame Assembly.....                               | 8  |
| Control Tower With Decals Assembly No. 116-5013.....   | 9  |
| Wheel and Bearing Assembly No. 112-3810.....           | 10 |
| Park Brake Assembly.....                               | 11 |
| Deck Lift Assembly.....                                | 12 |
| Platform Group.....                                    | 14 |
| Cushion Assembly No. 116-1803.....                     | 15 |
| Platform Assembly No. 116-1804.....                    | 16 |
| Ground Drive Assembly.....                             | 17 |
| Wheel Motor Assembly No. 116-4851.....                 | 19 |
| Pump Idler Assembly No. 117-7685.....                  | 20 |
| Control Assembly.....                                  | 21 |
| LH Tracking Control Linkage Assembly No. 116-4936..... | 23 |
| RH Tracking Control Linkage Assembly No. 116-4937..... | 24 |
| Engine Assembly.....                                   | 25 |
| Fuel Assembly.....                                     | 26 |
| Fuel Tank Assembly No. 116-4577.....                   | 27 |
| Electrical Assembly.....                               | 28 |



## Complete Deck Assembly

| Ref. | Part Number | Qty. | Description           |
|------|-------------|------|-----------------------|
| 1    | 116-5011    | 1    | ASM-Deck Complete 484 |



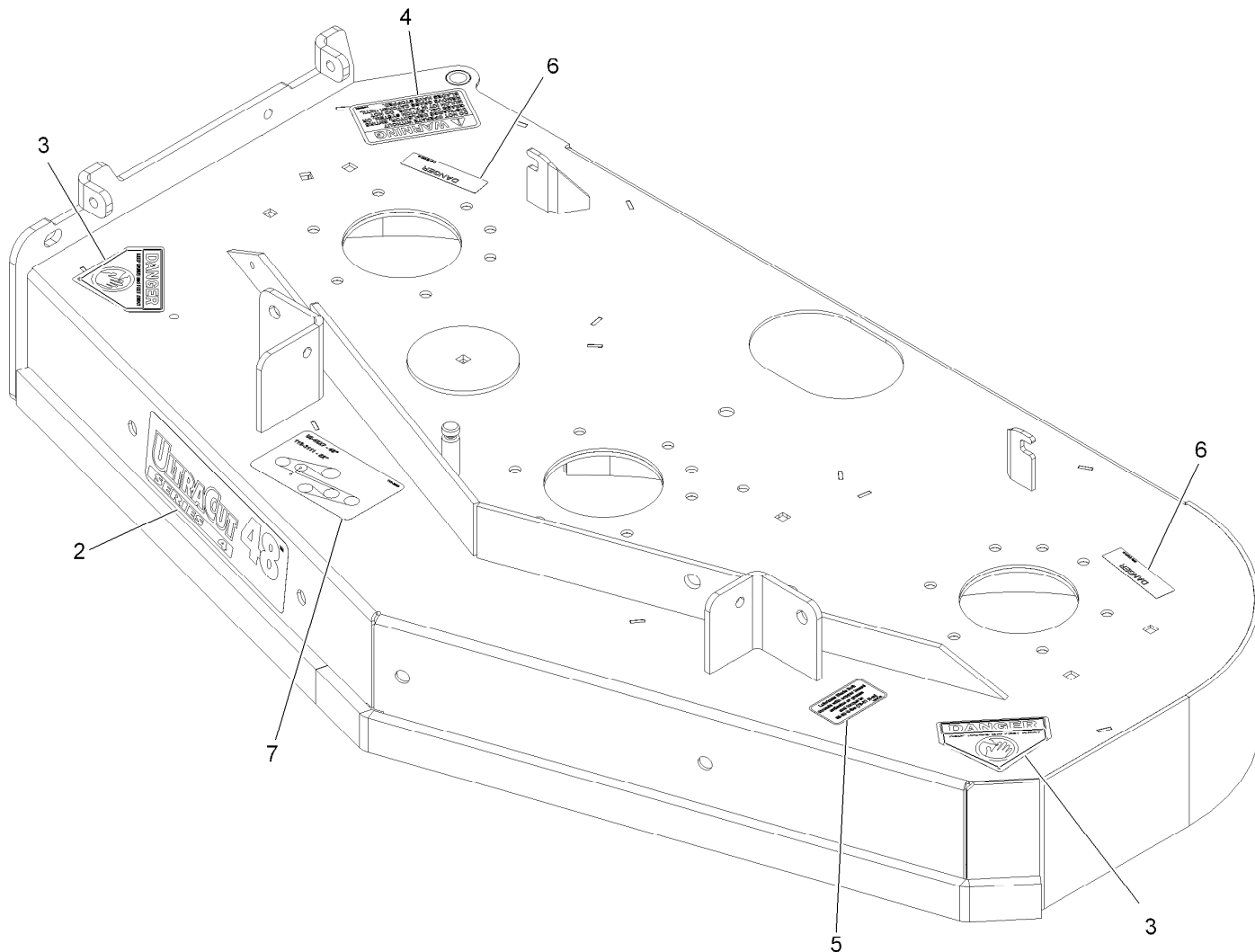
## Deck Assembly

| Ref. | Part Number | Qty. | Description                  |
|------|-------------|------|------------------------------|
| 1    | 116-3999    | 1    | Deck ASM-484                 |
| 2    | 116-3344    | 3    | ASM-Cutter Hsg With Bearings |
| 2:2  | 116-0720    | 2    | Bearing-Ball                 |
| 2:3  | 116-3312    | 1    | Spacer-Bearing               |
| 3    | 116-3341    | 3    | ASM-Spindle And Seal ■       |
| 4    | 109-6658    | 29   | Nut-Nyloc 3/8-16 Flg         |
| 5    | 103-6391    | 3    | Blade, Mulching (48") ●      |
| 5    | 116-5177    | 3    | Blade-Extreme 2, 16.25"      |
| 5    | 103-6401    | 3    | Blade-Notched                |
| 5    | 103-6386    | 3    | Blade, Low Lift (48")        |
| 5    | 103-6381    | 3    | Blade, Solid (48")           |
| 6    | 3231-7      | 1    | Bolt-Carriage 3/8-16 X 2 1/4 |
| 7    | 109-2872    | 1    | Spacer-Pulley                |
| 8    | 116-4665    | 1    | Idler-Pulley, Flat           |
| 9    | 3231-11     | 1    | Bolt-Carriage 3/8-16 X 3 1/2 |
| 10   | 103-2916    | 1    | Guard-Top                    |
| 12   | 116-3806    | 1    | Idler Arm ASM W/Bearings     |
| 13   | 116-3381    | 1    | Bolt-Carriage 3/8-16 X 1 3/4 |
| 14   | 1-373034    | 1    | Washer                       |
| 15   | 93-1622     | 1    | Pulley-Idler                 |
| 16   | 99-4627     | 1    | V-Belt                       |

| Ref. | Part Number | Qty. | Description                  |
|------|-------------|------|------------------------------|
| 17   | 116-6317    | 1    | Spring-Extension             |
| 18   | 109-7188    | 1    | ASM,Discharge Chute          |
| 18:1 | 109-2738    | 1    | Chute, Discharge             |
| 18:2 | 109-8675-01 | 1    | Bracket,Discharge Chute      |
| 18:3 | 3231-22     | 3    | Bolt-Carriage 3/8-16 X 1     |
| 18:4 | 109-6658    | 3    | Nut-Nyloc 3/8-16 Flg         |
| 19   | 3231-28     | 4    | Bolt-Carriage 3/8-16 X 1 1/4 |
| 20   | 109-6982    | 2    | Wireform-Cover               |
| 21   | 109-6935    | 1    | Cover-Belt, RH               |
| 22   | 109-6936    | 1    | Cover-Belt, LH               |
| 23   | 116-5995-01 | 1    | Baffle-Dogleg,Lzs Lzx Vt48   |
| 24   | 116-1822-01 | 6    | Bar,Weight                   |
| 25   | 1-513435    | 4    | Washer-Spring Disc 1/2       |
| 26   | 325-6       | 4    | Screw-HH 1/2-13 X 1 1/2      |
| 27   | 32128-49    | 4    | Nut-Whizlock 1/2-13          |
| 28   | 116-7306    | 3    | Nut-Hex                      |
| 29   | 103-3037    | 3    | Bushing, Splined             |
| 30   | 109-9220    | 3    | Screw-Sems 1/2-20 X 2.19     |
| 31   | 116-1286    | 3    | Guard,Bearing Top .989       |
| 32   | 116-0674    | 3    | Sheave,Blade Drive 5.90 ■    |
| 33   | 103-2802    | 3    | Washer-Spring Disc 3/4       |

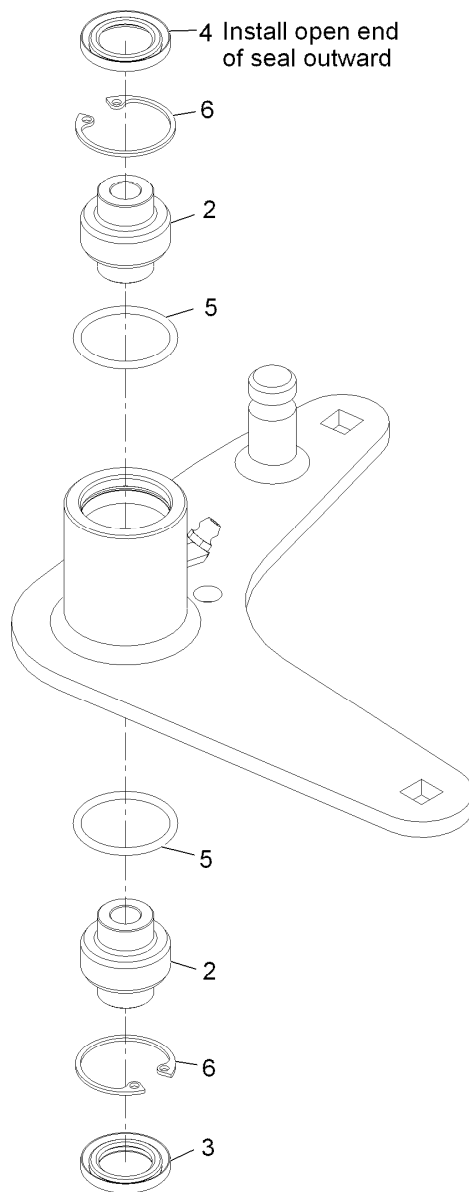
● Requires installation of mulch kit for proper mulching. See your Exmark dealer for details.

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



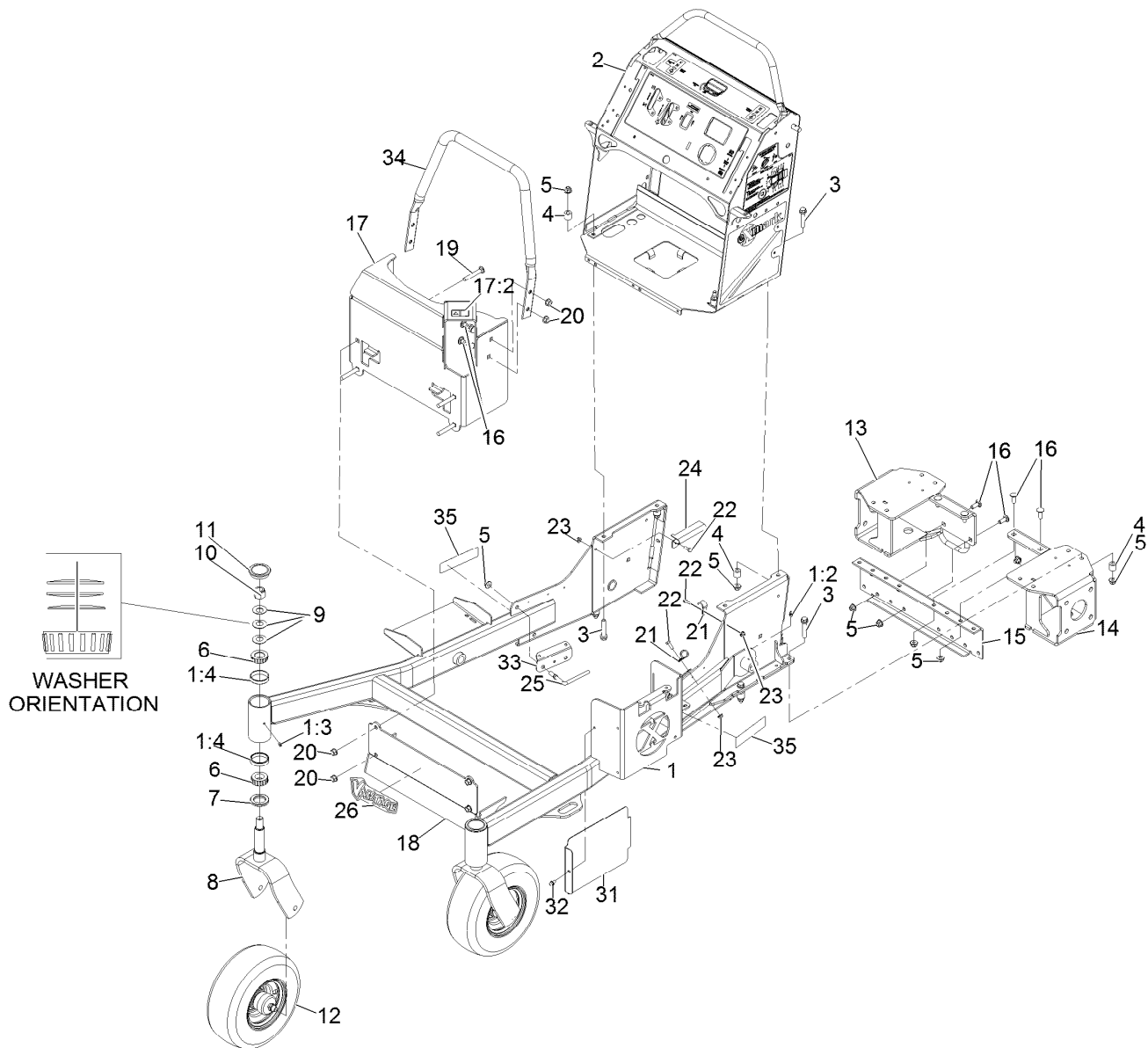
## Deck W/Decals Assembly No. 116-3999

| Ref. | Part Number | Qty. | Description                |
|------|-------------|------|----------------------------|
| 2    | 116-0033    | 1    | Decal,Ultracut 48 Series 4 |
| 3    | 1-403005    | 2    | Decal-Danger               |
| 4    | 1-303508    | 1    | Decal-Warning, Discharge   |
| 5    | 109-3148    | 1    | Decal, Bolt Torque         |
| 6    | 98-5954     | 2    | Decal-Cover, Missing       |
| 7    | 116-3283    | 1    | Decal-Belt Routing         |



## Idler Arm Assembly No. 116-3806

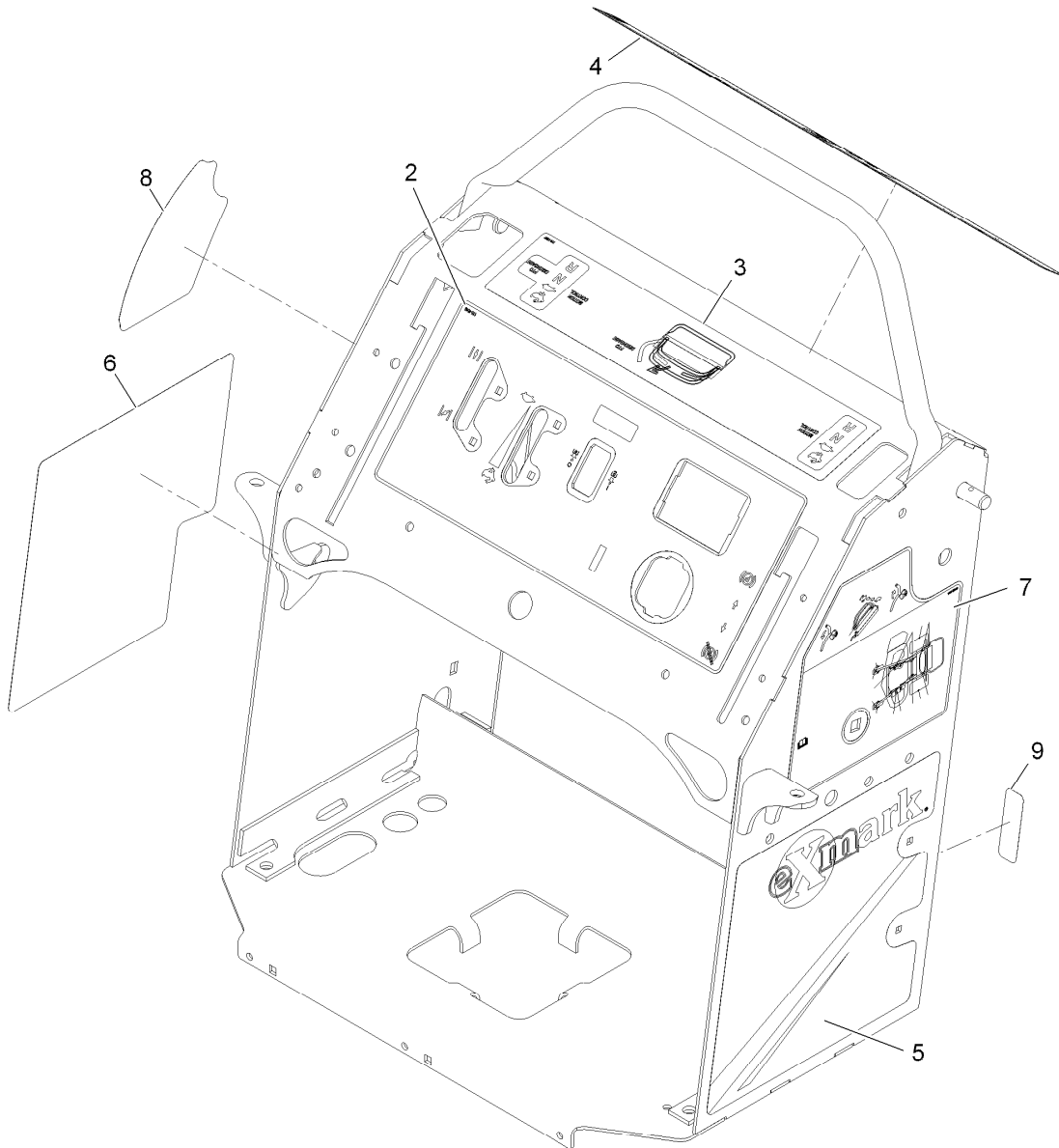
| Ref. | Part Number | Qty. | Description       |
|------|-------------|------|-------------------|
| 2    | 103-3504    | 2    | Bearing-Spherical |
| 3    | 103-3505    | 1    | Seal, Double, Lip |
| 4    | 103-3506    | 1    | Seal-Single Lip   |
| 5    | 106-7159    | 2    | O-Ring            |
| 6    | 32120-10    | 2    | Ring-Retaining    |



## Main Frame Assembly

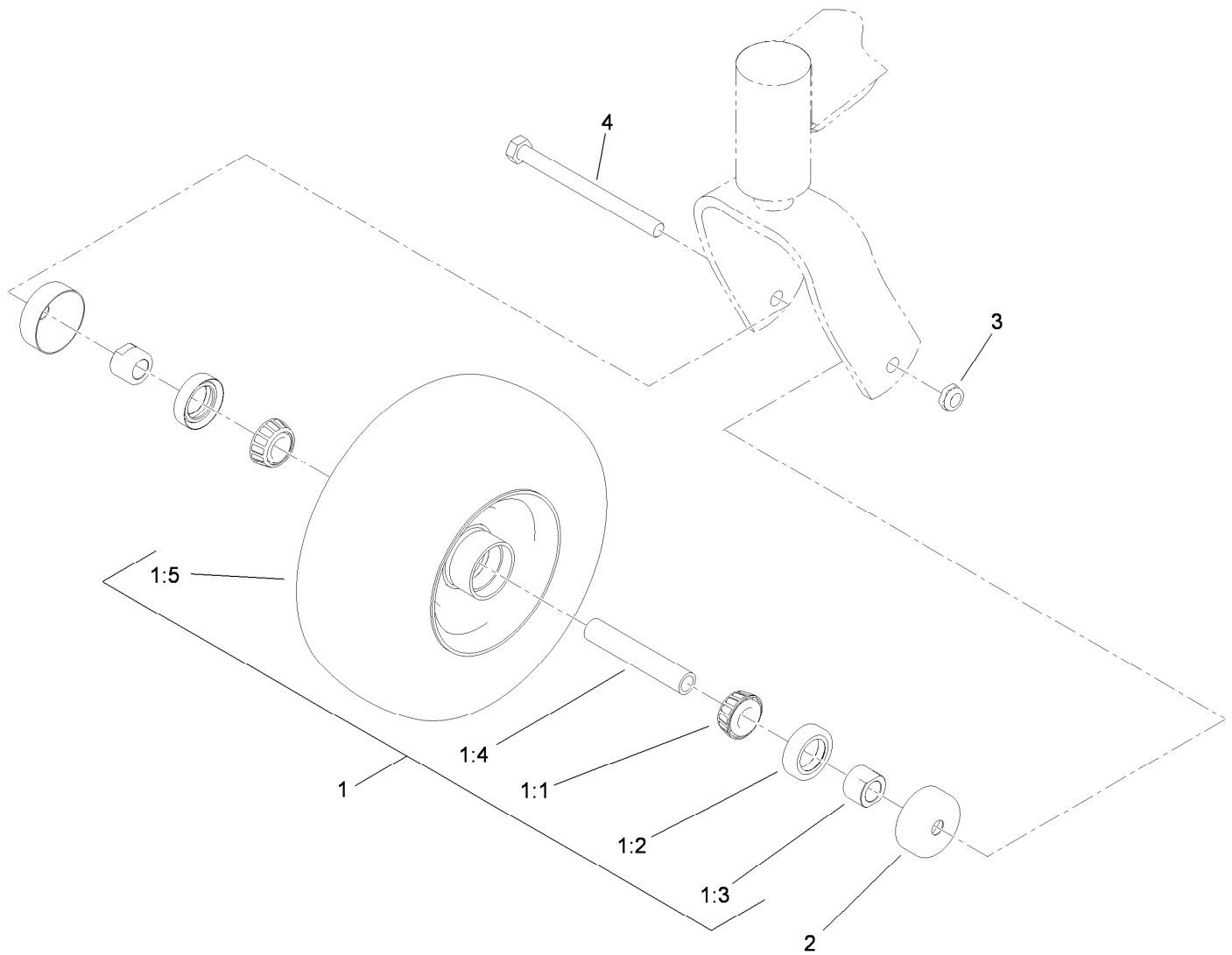
| Ref. | Part Number | Qty. | Description                  |
|------|-------------|------|------------------------------|
| 1    | 116-7045    | 1    | Front Frame ASM              |
| 1:2  | 302-5       | 4    | Zerk 1/4-28 Str Thrd Forming |
| 1:3  | 1-811010    | 2    | Plug                         |
| 1:4  | 1-543508    | 4    | Cup-Bearing                  |
| 2    | 116-5013    | 1    | Control Tower ASM            |
| 3    | 108-3742    | 8    | Screw-HH Flg 3/8-16 X 2      |
| 4    | 121-1760    | 8    | Spacer                       |
| 5    | 104-8301    | 18   | Nut-Nyloc 3/8-16 Flg         |
| 6    | 1-543509    | 4    | Cone-Bearing Tapered Roller  |
| 7    | 1-543511    | 2    | Seal-Grease                  |
| 8    | 103-8618-01 | 2    | Fork-Caster                  |
| 9    | 1-633508    | 6    | Washer-Spring Disc           |
| 10   | 3296-51     | 2    | Nut-Nyloc 3/4-10             |
| 11   | 103-4882    | 2    | Cap-Grease                   |
| 12   | 112-3810    | 2    | Wheel/Tire And Bearing ASM   |
| 13   | 119-7222-03 | 1    | RH Motor Mount ASM           |
| 14   | 119-7220-03 | 1    | LH Motor Mount ASM           |

| Ref. | Part Number | Qty. | Description                   |
|------|-------------|------|-------------------------------|
| 15   | 119-7224-03 | 1    | Mount-Motor, Center           |
| 16   | 3231-22     | 12   | Bolt-Carriage 3/8-16 X 1      |
| 17   | 116-6373    | 1    | Muffer Guard ASM              |
| 17:2 | 106-5517    | 1    | Decal-Warning, Hot Surface    |
| 18   | 116-3113-01 | 1    | Panel-Guard                   |
| 19   | 3231-31     | 4    | Bolt-Carriage 3/8-16 X 2 1/2  |
| 20   | 32128-21    | 8    | Nut-3/8-16 Flanged Side Lock  |
| 21   | 2412-87     | 1    | Clamp-Cable                   |
| 22   | 321-4       | 2    | Screw-HH 1/4-20 X 3/4         |
| 23   | 104-7201    | 2    | Nut-Nyloc 1/4-20 Flg          |
| 24   | 116-5067    | 1    | Bracket-Hose, Fuel (Double)   |
| 25   | 116-3382    | 2    | Guide-Hose, Support           |
| 26   | 116-3137    | 1    | Decal-Vantage Logo            |
| 31   | 116-6981-01 | 1    | Shield-Heat, Tall             |
| 32   | 32144-4     | 1    | Screw-HWH 1/4-20 X 1/2 Tapite |
| 33   | 116-6997-01 | 2    | Guard-Hose                    |
| 34   | 116-8152-03 | 1    | Tube, Guard                   |
| 35   | 116-3884    | 2    | Decal-S-Series                |



## Control Tower With Decals Assembly No. 116-5013

| Ref. | Part Number | Qty. | Description          |
|------|-------------|------|----------------------|
| 2    | 116-4648    | 1    | Decal-Control Panel  |
| 3    | 116-1887    | 1    | Decal-Motion Control |
| 4    | 116-4647    | 1    | Decal-Warning        |
| 5    | 116-4269    | 1    | Decal-LH Panel       |
| 6    | 116-1909    | 1    | Decal-RH Panel       |
| 7    | 116-5040    | 1    | Decal-Service Aid    |
| 8    | 116-2040    | 1    | Decal-Height Of Cut  |
| 9    | 116-3267    | 1    | Decal-Fuse           |

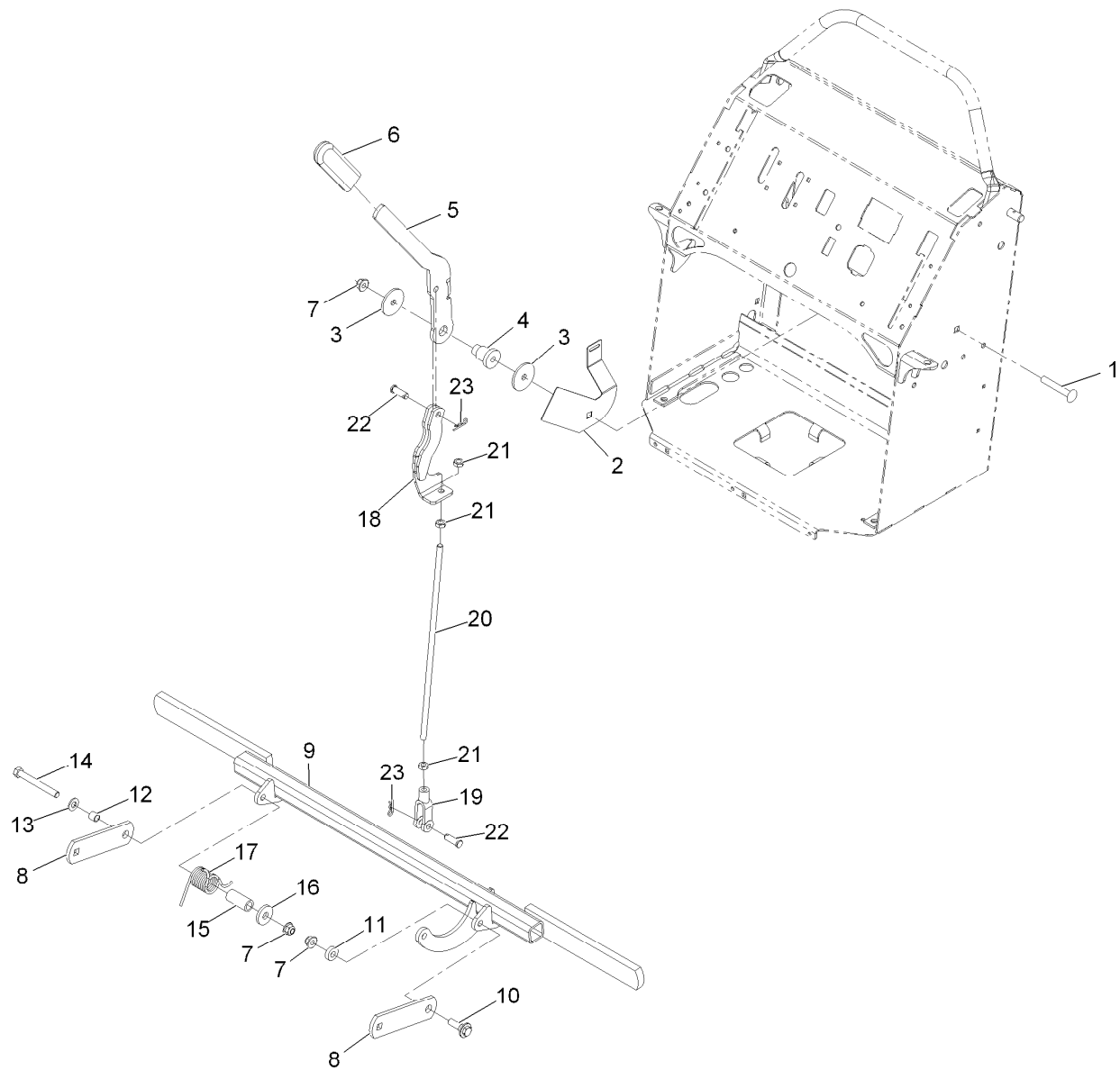


## Wheel and Bearing Assembly No. 112-3810

| Ref. | Part Number | Qty. | Description             |
|------|-------------|------|-------------------------|
| 1    |             | 1    | Wheel And Bearing ASM ● |
| 1:1  | 1-633585    | 2    | Bearing-Cone, Taper     |
| 1:2  | 103-0063    | 2    | Seal-Caster             |
| 1:3  | 103-3051    | 2    | Spacer-Nut ■            |
| 1:4  | 103-3157    | 1    | Axle-Caster             |
| 1:5  | 110-9965    | 1    | Wheel And Tire ASM      |
| 2    | 103-2768    | 2    | Guard-Seal              |
| 3    | 3296-45     | 1    | Nut-Lock, NI            |
| 4    | 325-20      | 1    | Screw-HH                |

● Not serviced separately

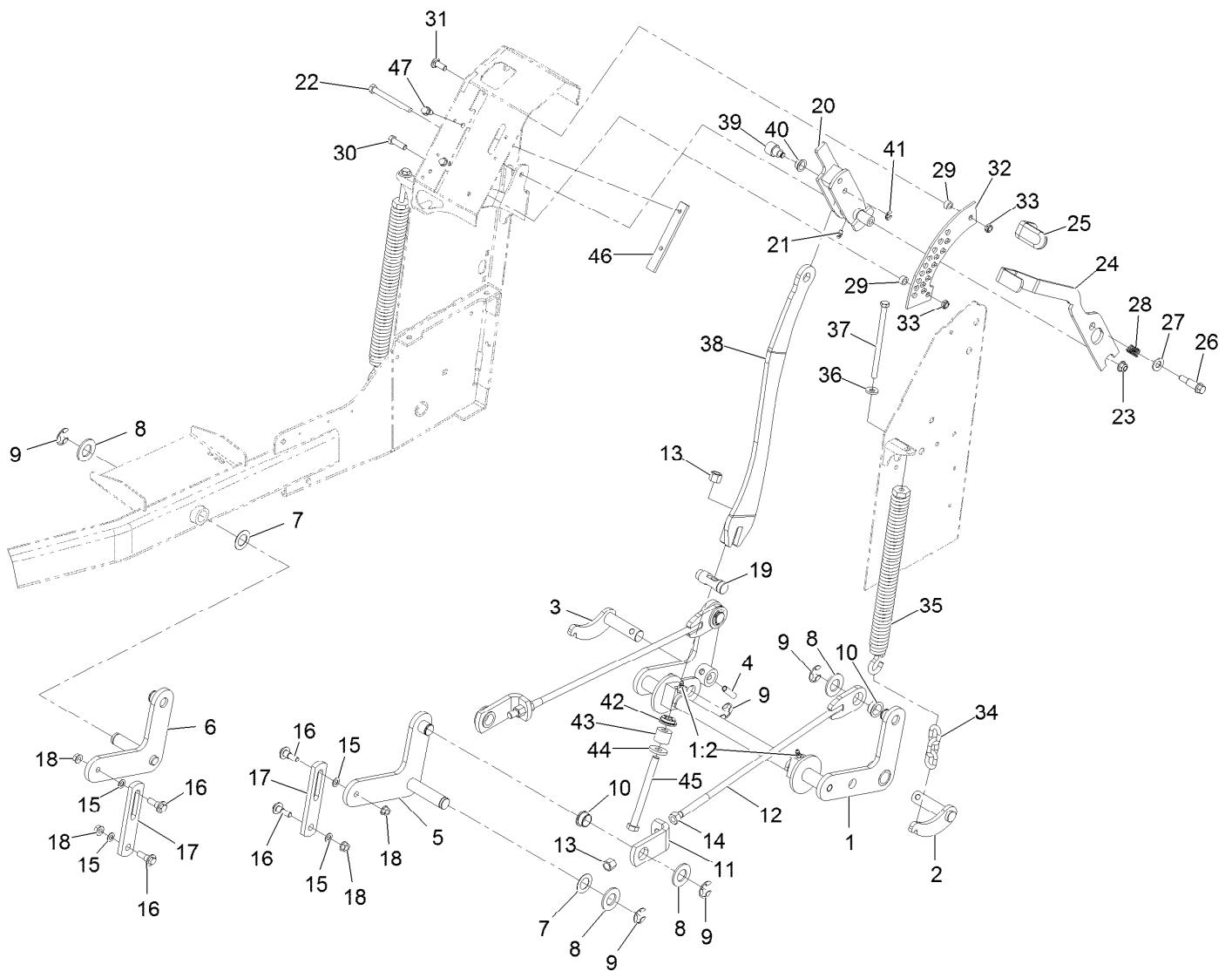
■ Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on spacer nut



## Park Brake Assembly

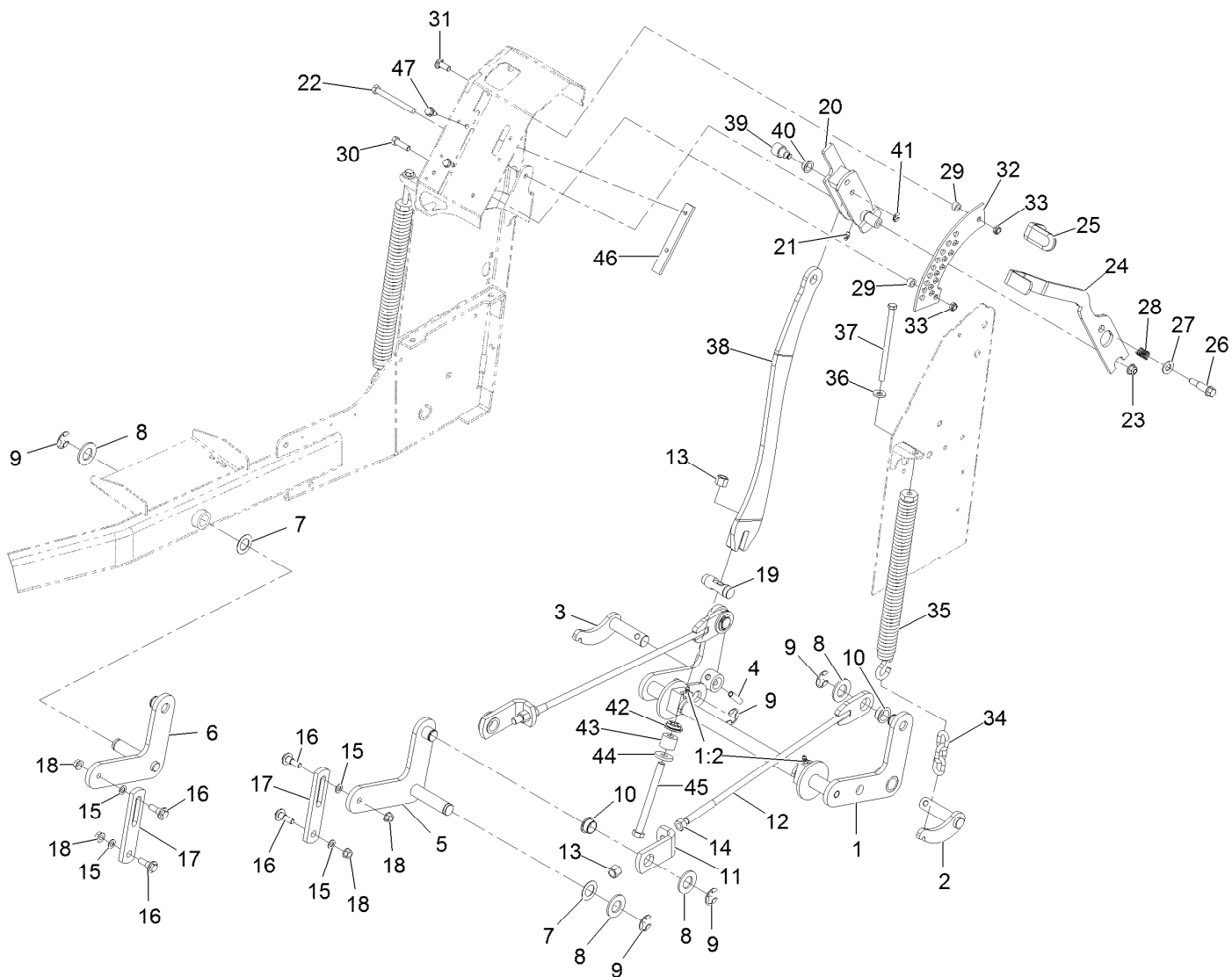
| Ref. | Part Number | Qty. | Description                   |
|------|-------------|------|-------------------------------|
| 1    | 3231-44     | 1    | Bolt-Carriage 3/8-16 X 2 1/2  |
| 2    | 117-0452-03 | 1    | Plate-Switch, Brake           |
| 3    | 63-7400     | 2    | Washer-Rebound                |
| 4    | 106-3214    | 1    | Mount-Pulley                  |
| 5    | 117-5759-03 | 1    | Lever-Brake                   |
| 6    | 1-633268    | 1    | Grip-Lever                    |
| 7    | 104-8301    | 3    | Nut-Nyloc 3/8-16 Flg          |
| 8    | 114-5186-01 | 2    | Support-Brake                 |
| 9    | 119-8730-03 | 1    | Bar-Brake                     |
| 10   | 614672      | 1    | Screw-Shoulder 3/8-16 X 1.295 |
| 11   | 5-0652      | 1    | Spacer                        |

| Ref. | Part Number | Qty. | Description             |
|------|-------------|------|-------------------------|
| 12   | 117-9684    | 1    | Spacer                  |
| 13   | 3256-24     | 1    | Washer-3/8 Sae          |
| 14   | 323-20      | 1    | Screw-HH 3/8-16 X 3-1/4 |
| 15   | 117-9683    | 1    | Spacer                  |
| 16   | 117-9682    | 1    | Spring-Torsion          |
| 17   | 1-373034    | 1    | Washer                  |
| 18   | 119-8780-03 | 1    | Arm-Brake               |
| 19   | 1-633131    | 1    | Yoke-Linkage, Brake     |
| 20   | 119-7244    | 1    | Rod-Brake               |
| 21   | 3220-3      | 3    | Nut-Jam 3/8-24          |
| 22   | 283-2       | 2    | Pin-Clevis 3/8 X 1 1/6  |
| 23   | 3290-307    | 2    | Pin-Hair                |



## Deck Lift Assembly

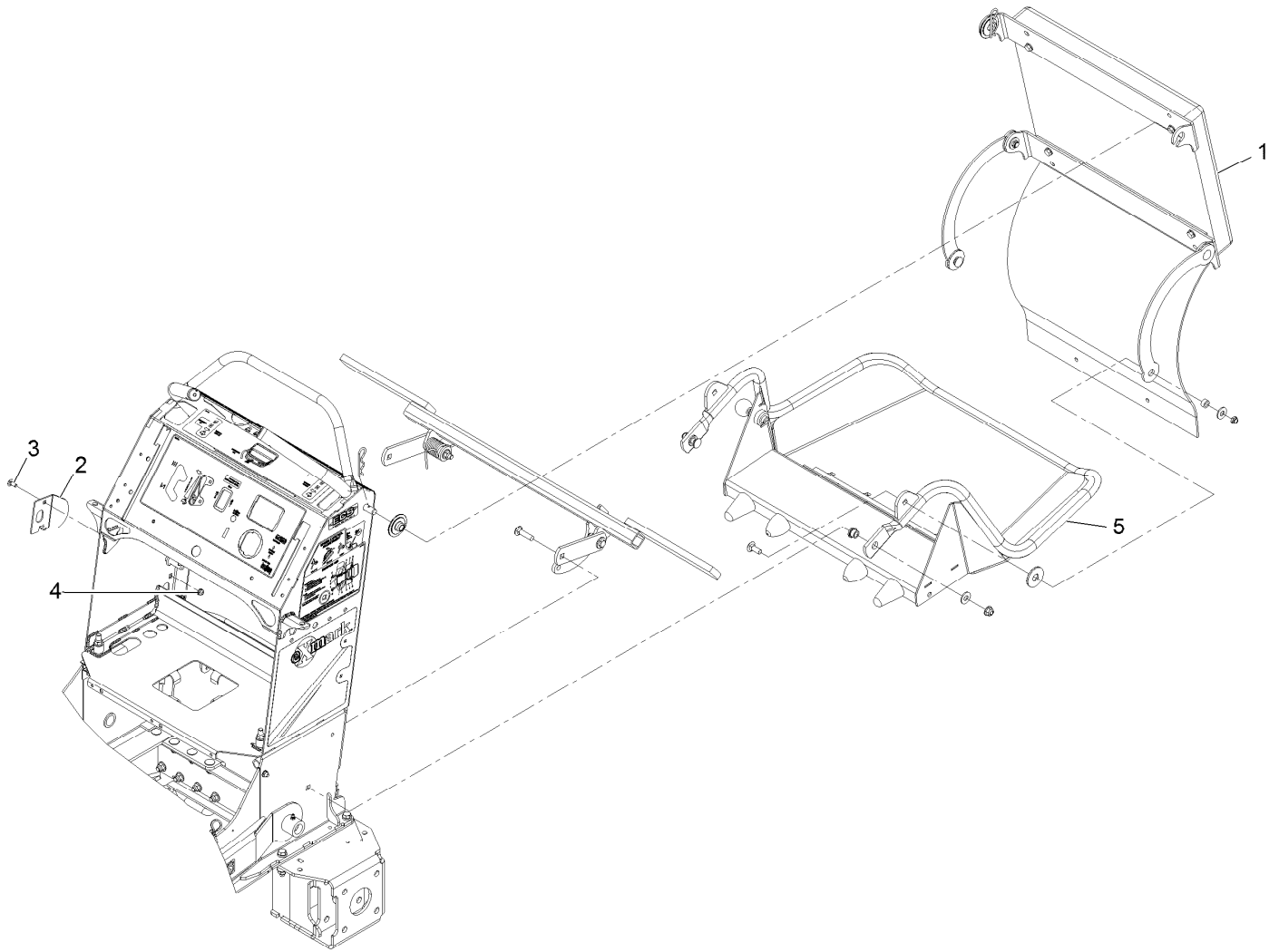
| Ref. | Part Number | Qty. | Description                   | Ref. | Part Number | Qty. | Description                  |
|------|-------------|------|-------------------------------|------|-------------|------|------------------------------|
| 1    | 116-3103    | 1    | Rear Crossshaft ASM           | 19   | 114-5274    | 1    | Pin-HOC                      |
| 1:2  | 302-11      | 2    | Zerk-45° 1/4-28               | 20   | 114-3512    | 1    | HOC Handle ASM               |
| 2    | 116-3104-01 | 1    | Shaft-Pivot, LH               | 21   | 302-5       | 1    | Zerk 1/4-28 Str Thrd Forming |
| 3    | 116-3105-01 | 1    | Shaft-Pivot, RH               | 22   | 323-42      | 1    | Screw-HH 3/8-16 X 3 3/4      |
| 4    | 116-3107    | 2    | Pin-Spiral                    | 23   | 104-8301    | 1    | Nut-Nyloc 3/8-16 Flg         |
| 5    | 121-5993-01 | 1    | Arm-Lift, LH                  | 24   | 114-1878-03 | 1    | Lever-HOC                    |
| 6    | 121-5994-01 | 1    | Arm-Lift, RH                  | 25   | 1-633268    | 1    | Grip-Lever                   |
| 7    | 110-6767    | 2    | Washer-Thrust                 | 26   | 66-0561     | 1    | Screw-Shoulder               |
| 8    | 3256-29     | 6    | Washer-7/8 Sae                | 27   | 3256-26     | 1    | Washer-1/2 Sae               |
| 9    | 32151-103   | 7    | E-Ring                        | 28   | 65-9940     | 1    | Spring                       |
| 10   | 116-2909    | 4    | Bearing-Flange                | 29   | 111044      | 2    | Bushing                      |
| 11   | 116-2901    | 2    | Bracket-Lift Rod              | 30   | 323-7       | 1    | Screw-HH 3/8-16 X 1 1/4      |
| 12   | 116-8676    | 2    | Lift Rod ASM                  | 31   | 3231-22     | 1    | Bolt-Carriage 3/8-16 X 1     |
| 13   | 3296-23     | 3    | Nut-Nyloc 1/2-13              | 32   | 114-5307    | 1    | Bracket-HOC                  |
| 14   | 3217-9      | 2    | Nut-Hex 1/2-13                | 33   | 3296-59     | 2    | Nut-Nyloc 3/8-16 Thin        |
| 15   | 40-1940     | 4    | Washer                        | 34   | 103-9859    | 2    | Chain-Decklift               |
| 16   | 109-9840    | 4    | Screw-Hex Flange 3/8-16 X .80 | 35   | 116-0886    | 2    | Extension Spring ASM         |
| 17   | 117-0519    | 2    | Link-Lift                     | 36   | 98-5975     | 2    | Washer-Spring Disc 3/8       |
| 18   | 32128-21    | 4    | Nut-3/8-16 Flanged Side Lock  | 37   | 323-58      | 2    | Bolt-HH 3/8-16 X 6 Tap       |
|      |             |      |                               | 38   | 116-2939    | 1    | Bar-Lift                     |



## Deck Lift Assembly (continued)

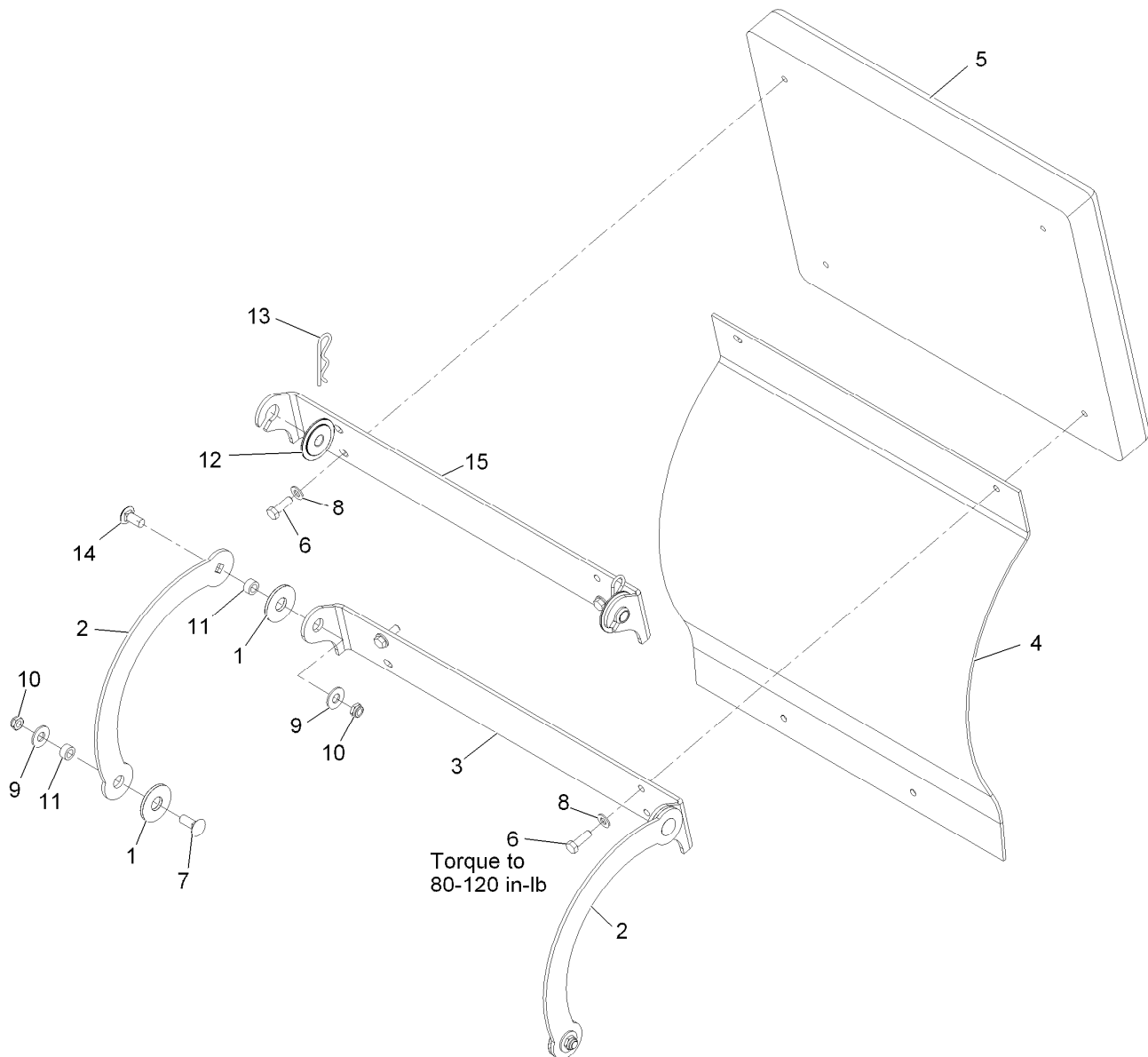
| Ref. | Part Number | Qty. | Description     |
|------|-------------|------|-----------------|
| 39   | 116-3048    | 1    | Hub-Pivot       |
| 40   | 116-3047    | 1    | Bearing-Flange  |
| 41   | 32151-47    | 1    | Ring-Retaining  |
| 42   | 116-3625    | 1    | Seat-Spring     |
| 43   | 116-3241    | 1    | Spring-Urethane |

| Ref. | Part Number | Qty. | Description                   |
|------|-------------|------|-------------------------------|
| 44   | 92-2651     | 1    | Washer                        |
| 45   | 325-22      | 1    | Screw-HH 1/2-13 X 5 1/2       |
| 46   | 116-3124    | 1    | Skid-Handle, Lift             |
| 47   | 32144-70    | 2    | Screw-HWH 5/16-18 X 3/4<br>Tf |



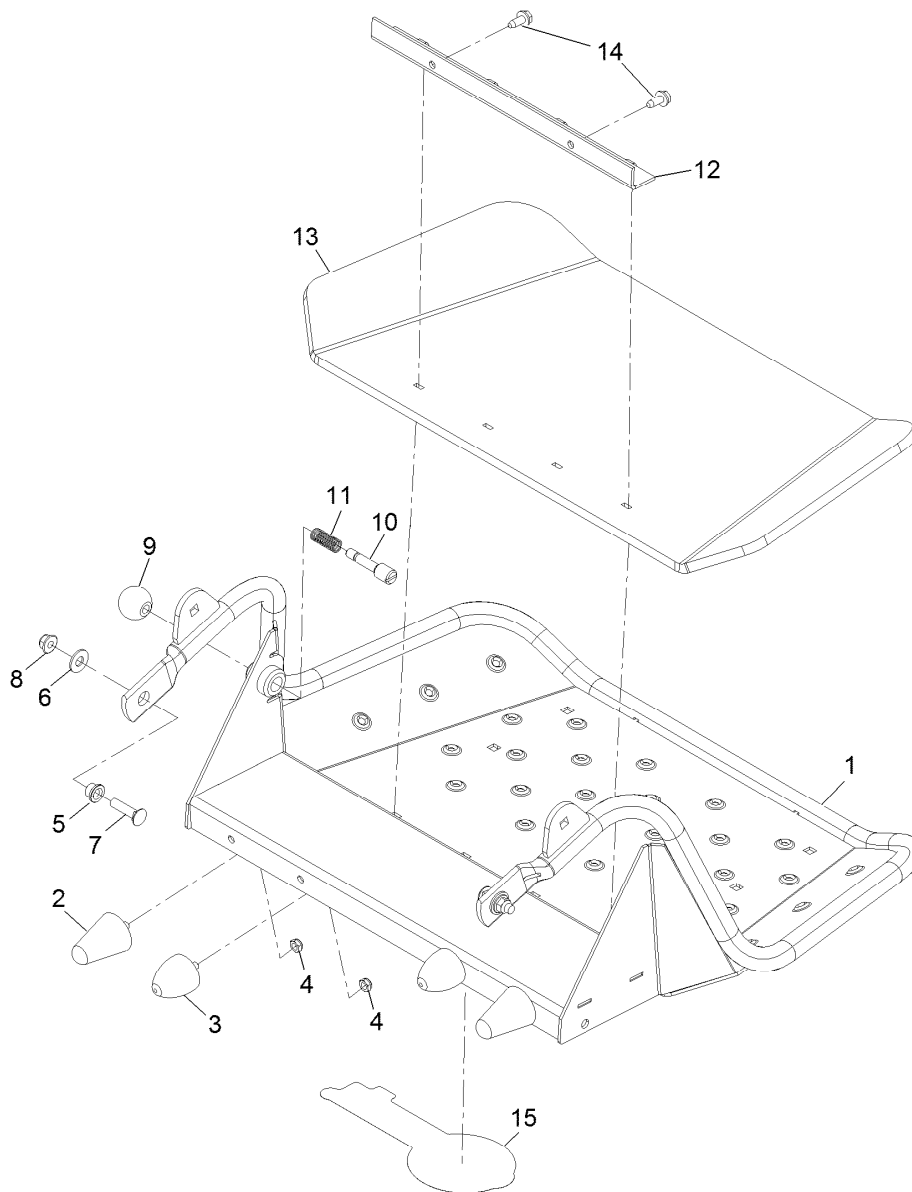
## Platform Group

| Ref. | Part Number | Qty. | Description                |
|------|-------------|------|----------------------------|
| 1    | 116-1803    | 1    | Cushion ASM                |
| 2    | 119-7312    | 1    | Plate-Striker              |
| 3    | 3229-11     | 1    | Bolt-Carriage 1/4-20 X 5/8 |
| 4    | 104-7201    | 1    | Nut-Nyloc 1/4-20 Flg       |
| 5    | 116-1804    | 1    | ASM,Platform               |



## Cushion Assembly No. 116-1803

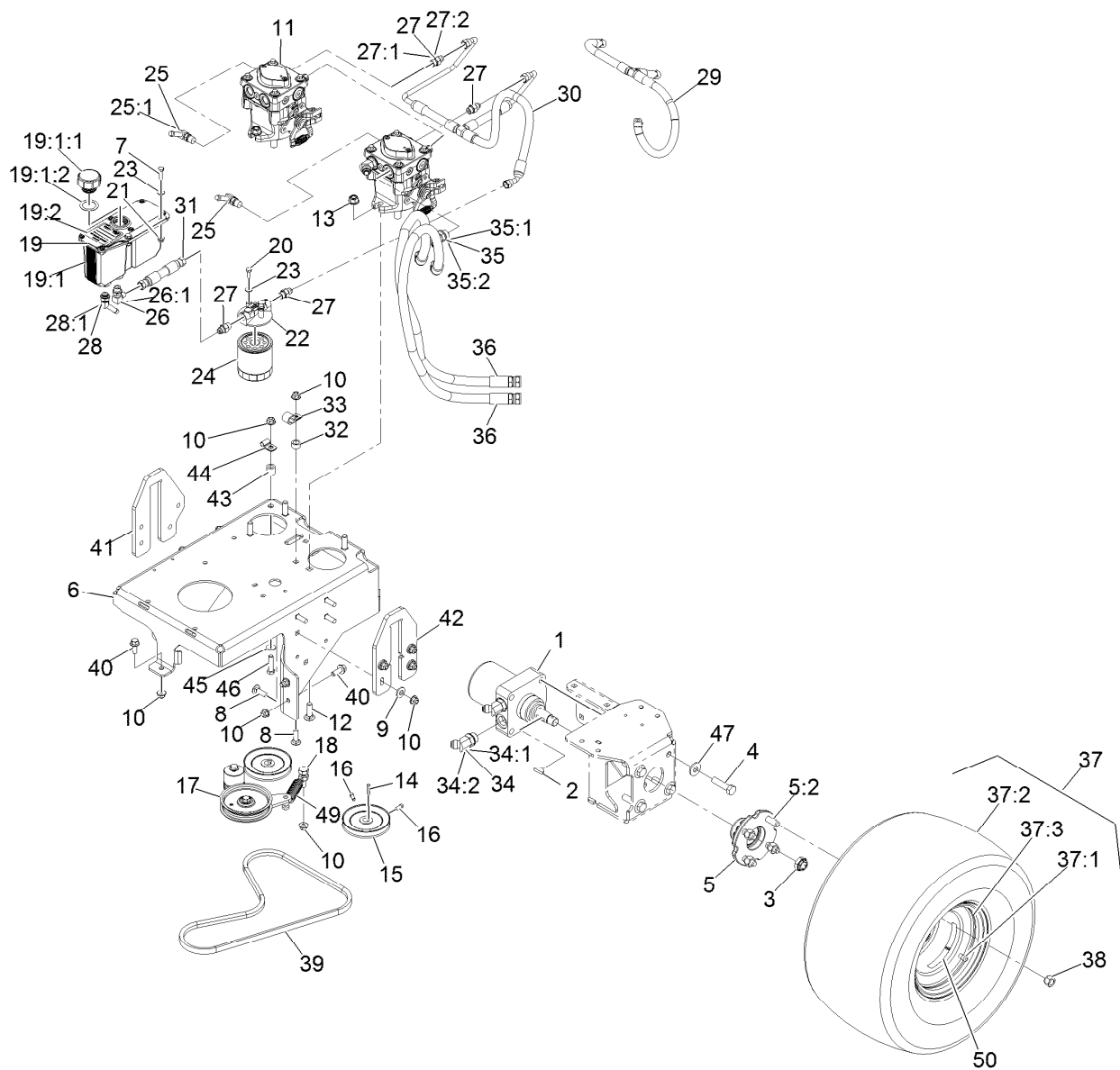
| Ref. | Part Number | Qty. | Description                  |
|------|-------------|------|------------------------------|
| 1    | 114-0463    | 4    | Washer-Friction, Composite   |
| 2    | 114-1915-03 | 2    | Link-Pad                     |
| 3    | 116-2061-03 | 1    | Hinge-Pad                    |
| 4    | 116-3406    | 1    | Shield-Rear                  |
| 5    | 116-1790    | 1    | Pad,Grey Cushion             |
| 6    | 116-0648    | 4    | Screw-HH 5/16-18 X 1 W/Patch |
| 7    | 3231-2      | 2    | Bolt-Carriage 3/8-16 X 1     |
| 8    | 3256-23     | 4    | Washer-5/16 Sae              |
| 9    | 3256-4      | 4    | Washer-3/8 Std               |
| 10   | 3296-59     | 4    | Nut-Nyloc 3/8-16 Thin        |
| 11   | 111044      | 4    | Bushing                      |
| 12   | 116-2886    | 2    | Slide-Bushing                |
| 13   | 3290-355    | 2    | Pin-Hair                     |
| 14   | 3231-27     | 2    | Bolt-Carriage 3/8-16 X 7/8   |
| 15   | 116-2757-03 | 1    | Hinge-Pad                    |



## Platform Assembly No. 116-1804

| Ref. | Part Number | Qty. | Description                  |
|------|-------------|------|------------------------------|
| 1    | 117-9641-03 | 1    | Platform ASM                 |
| 2    | 114-1925    | 2    | Bumper-Rubber                |
| 3    | 114-1926    | 2    | Bumper-Rubber                |
| 4    | 3296-47     | 4    | Nut-Nyloc 5/16-18 Thin       |
| 5    | 109-8788    | 2    | Bushing-Flanged              |
| 6    | 3256-4      | 2    | Washer-3/8 Std               |
| 7    | 3231-4      | 2    | Bolt-Carriage 3/8-16 X 1 1/2 |
| 8    | 104-8301    | 2    | Nut-Nyloc 3/8-16 Flg         |
| 9    | 1-603175    | 1    | Knob-Ball                    |
| 10   | 119-8650    | 1    | Pin-Latch ●                  |
| 11   | 114-5348    | 1    | Spring                       |
| 12   | 114-1920-03 | 1    | Clamp-Shield                 |
| 13   | 114-5349    | 1    | Mat-Foot                     |
| 14   | 32144-70    | 2    | Screw-HWH 5/16-18 X 3/4 Tf   |
| 15   | 1-653546    | 1    | Decal, Exmark                |

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



## Ground Drive Assembly

| Ref. | Part Number | Qty. | Description                   |
|------|-------------|------|-------------------------------|
| 1    | 116-4851    | 2    | Motor-Wheel                   |
| 2    | 3257-8      | 2    | Key-Woodruff                  |
| 3    | 116-2839    | 2    | Nut-Lock                      |
| 4    | 325-8       | 8    | Screw-HH 1/2-13 X 1 1/4       |
| 5    | 105-0800    | 2    | Wheel Hub ASM                 |
| 5:2  | 10-6830     | 4    | Stud-Type, Drive              |
| 6    | 116-8525-01 | 1    | Base, Engine [red]            |
| 7    | 321-6       | 2    | Screw-HH 1/4-20 X 1           |
| 8    | 3231-25     | 9    | Bolt-Carriage 3/8-16 X 1 1/4  |
| 9    | 98-5975     | 8    | Washer-Spring Disc 3/8        |
| 10   | 104-8301    | 16   | Nut-Nyloc 3/8-16 Flg          |
| 11   | 116-2572    | 2    | Pump - Hydraulic              |
| 12   | 3232-3      | 4    | Bolt-Carriage 7/16-14 X 1 1/2 |
| 13   | 114-8417    | 4    | Nut-HF, NI                    |
| 14   | 1-807272    | 2    | Key-5Mm X 5Mm X 25Mm          |
| 15   | 105-5648    | 2    | Pulley-Pump ■                 |

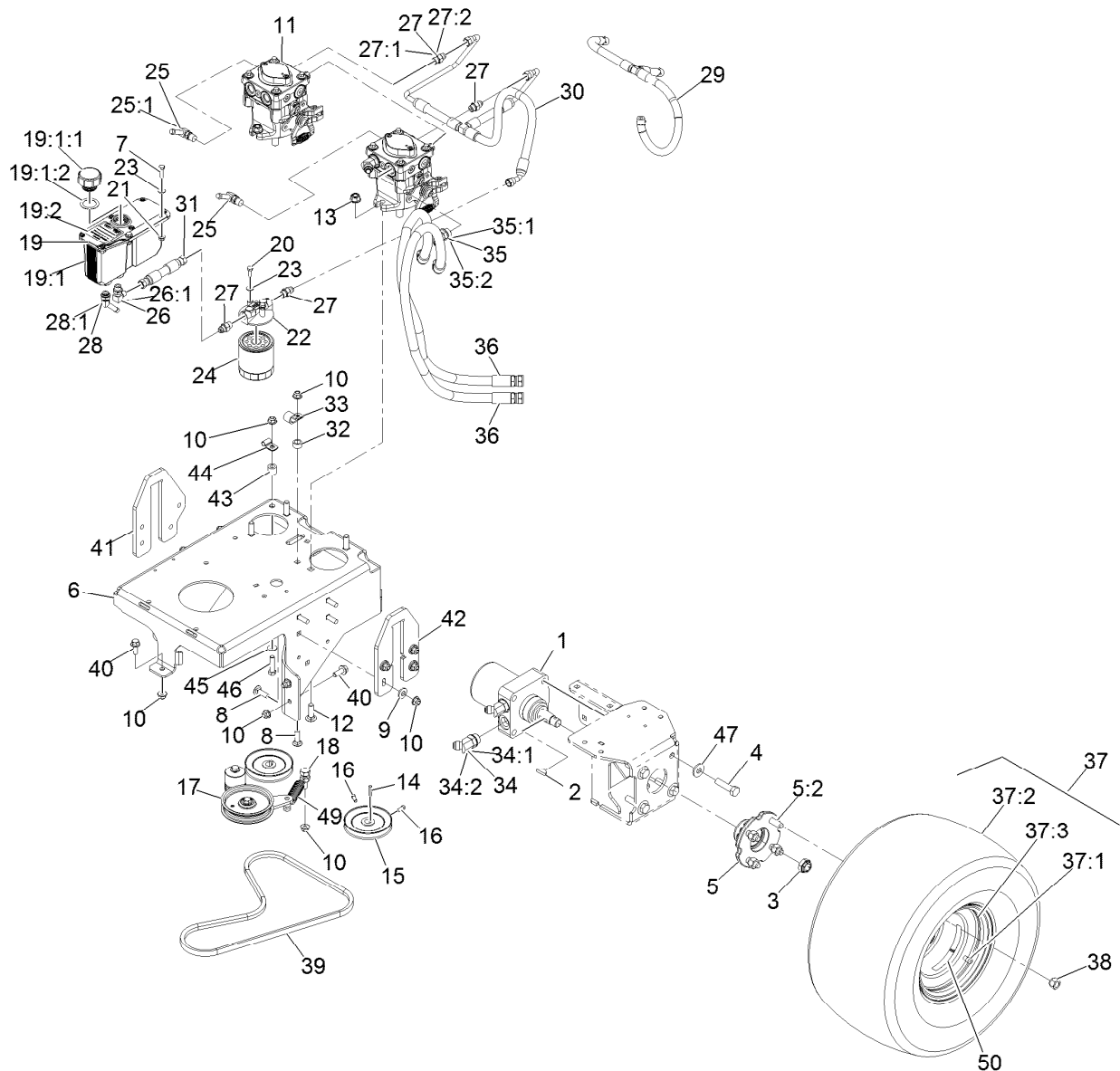
| Ref.   | Part Number | Qty. | Description                    |
|--------|-------------|------|--------------------------------|
| 16     | 3241-5      | 4    | Setscrew-SQH 1/4-20 X 5/8<br>◆ |
| 17     | 116-7600    | 1    | Pump Idler ASM                 |
| 18     | 116-8526    | 1    | Anchor, Spring                 |
| 19     | 116-2066    | 1    | ASM,Reservoir W/Decals ▲       |
| 19:1   |             | 1    | Reservoir-HYD ●                |
| 19:1:1 | 103-1948    | 1    | Cap-Reservoir, HYD             |
| 19:1:2 | 103-1949    | 1    | Gasket-Cap                     |
| 19:2   | 116-0404    | 1    | Decal-Hydraulic Tank           |
| 20     | 321-4       | 2    | Screw-HH 1/4-20 X 3/4          |
| 21     | 32128-32    | 2    | Nut-Hex 1/4-20 Side Lock       |
| 22     | 104-7836    | 1    | Filter-Head                    |
| 23     | 3256-22     | 4    | Washer-1/4 Sae                 |
| 24     | 109-4180    | 1    | Element, Oil Filter            |
| 25     | 100-4887    | 2    | Fitting-Barbed, 90 DEG         |
| 25:1   | 237-42      | 1    | O-Ring                         |
| 26     | 103-1802    | 1    | Fitting-HYD, 90 DEG            |

● Not serviced separately

▲ Use Exmark Premium Hydro Oil P/N 109-9828 (32oz)

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

■ Apply anti-seize compound in bore.



## Ground Drive Assembly (continued)

| Ref. | Part Number | Qty. | Description            |
|------|-------------|------|------------------------|
| 26:1 | 1-603921    | 1    | O-Ring-Sae #6          |
| 27   | 103-2156    | 4    | Adapter-Straight       |
| 27:1 | 1-603921    | 1    | O-Ring-Sae #6          |
| 27:2 | 103-1020    | 1    | O-Ring-37 Flare #6     |
| 28   | 103-1807    | 1    | Fitting-Barbed, 45 DEG |
| 28:1 | 237-42      | 1    | O-Ring                 |
| 29   | 116-2579    | 1    | Tank Hose ASM          |
| 30   | 116-2650    | 1    | Hose Assembly - Charge |
| 31   | 116-2604    | 1    | HYD Hose ASM           |
| 32   | 1-653069    | 1    | Spacer-Wheel           |
| 33   | 1-633396    | 1    | Clip-Loom 5/8          |
| 34   | 1-523222    | 4    | Fitting-HYD, 45 DEG    |
| 34:1 | 1-603919    | 1    | O-Ring-Sae #10         |
| 34:2 | 1-603992    | 1    | O-Ring-37 Flare #8     |
| 35   | 1-523221    | 4    | Fitting-HYD, 45 DEG    |
| 35:1 | 1-603920    | 1    | O-Ring-Sae #8          |
| 35:2 | 1-603992    | 1    | O-Ring-37 Flare #8     |

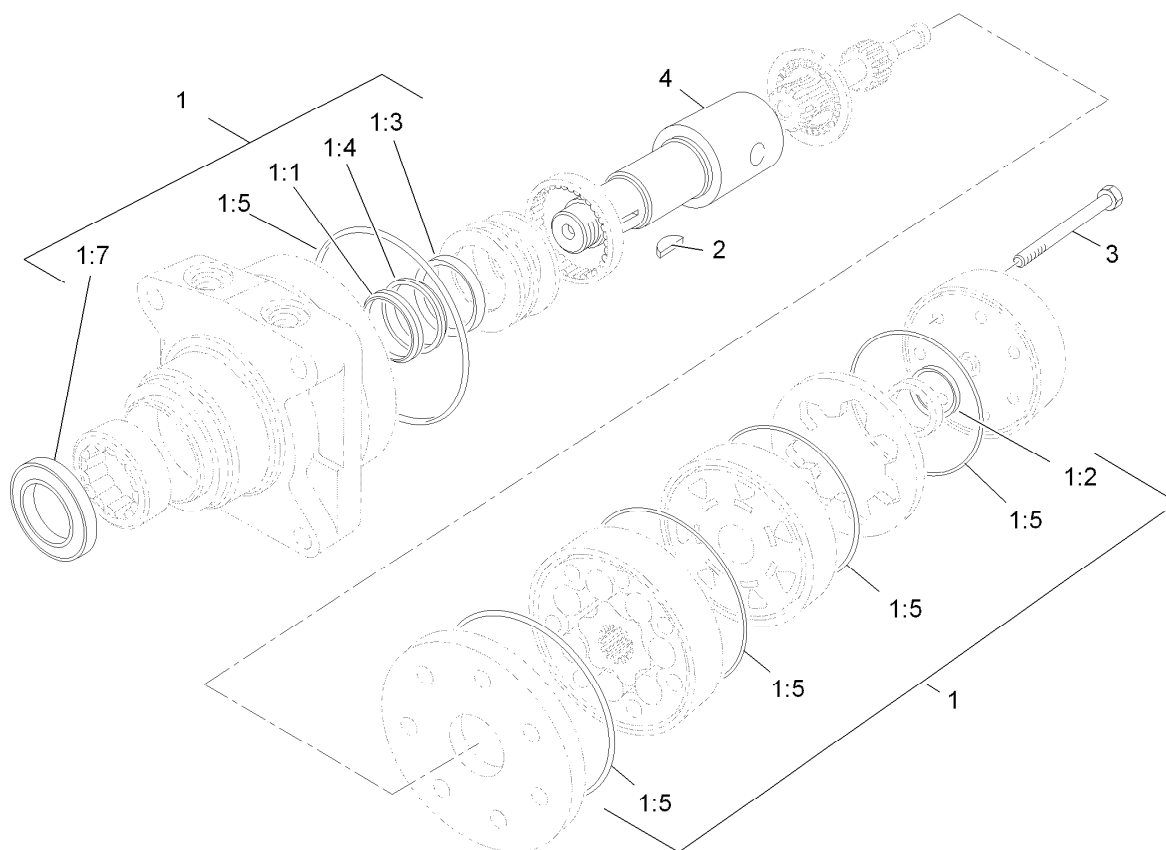
| Ref. | Part Number | Qty. | Description             |
|------|-------------|------|-------------------------|
| 36   | 116-6902    | 4    | HYD Hose ASM            |
| 37   | 120-6465    | 2    | Wheel/Tire ASM          |
| 37:1 | 116-4605    | 1    | Rim-8 Inch              |
| 37:2 | 120-6466    | 1    | Tire                    |
| 37:3 | 232-27      | 1    | Stem-Valve              |
| 38   | 242-50      | 8    | Nut-Lug 1/2-20          |
| 39   | 114567      | 1    | Belt-V                  |
| 40   | 3234-42     | 5    | Screw HHF 3/8-16 X 1    |
| 41   | 116-4922    | 1    | Plate-Lift, RH          |
| 42   | 116-3546    | 1    | Plate, Lift LH          |
| 43   | 121-1760    | 1    | Spacer                  |
| 44   | 116-3362    | 1    | Clip-Tube               |
| 45   | 3256-24     | 1    | Washer-3/8 Sae          |
| 46   | 323-8       | 1    | Screw-HH 3/8-16 X 1 1/2 |
| 47   | 1-513435    | 8    | Washer-Spring Disc 1/2  |
| 49   | 108-4056    | 1    | Spring-Extension        |
| 50   | 116-4181    | 2    | Decal-Wheel Hub         |

● Not serviced separately

▲ Use Exmark Premium Hydro Oil P/N 109-9828 (32oz)

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

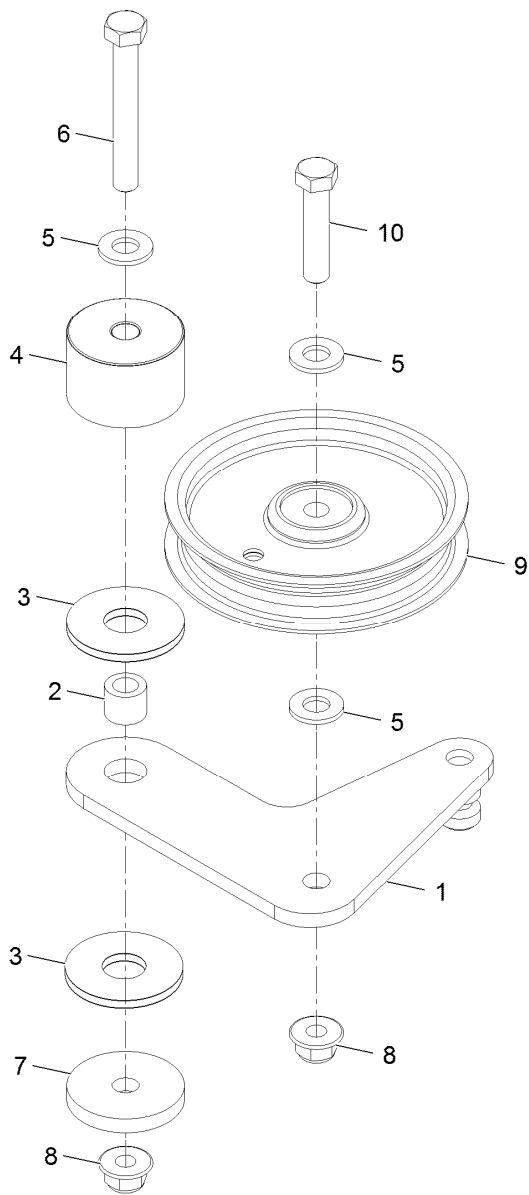
■ Apply anti-seize compound in bore.



## Wheel Motor Assembly No. 116-4851

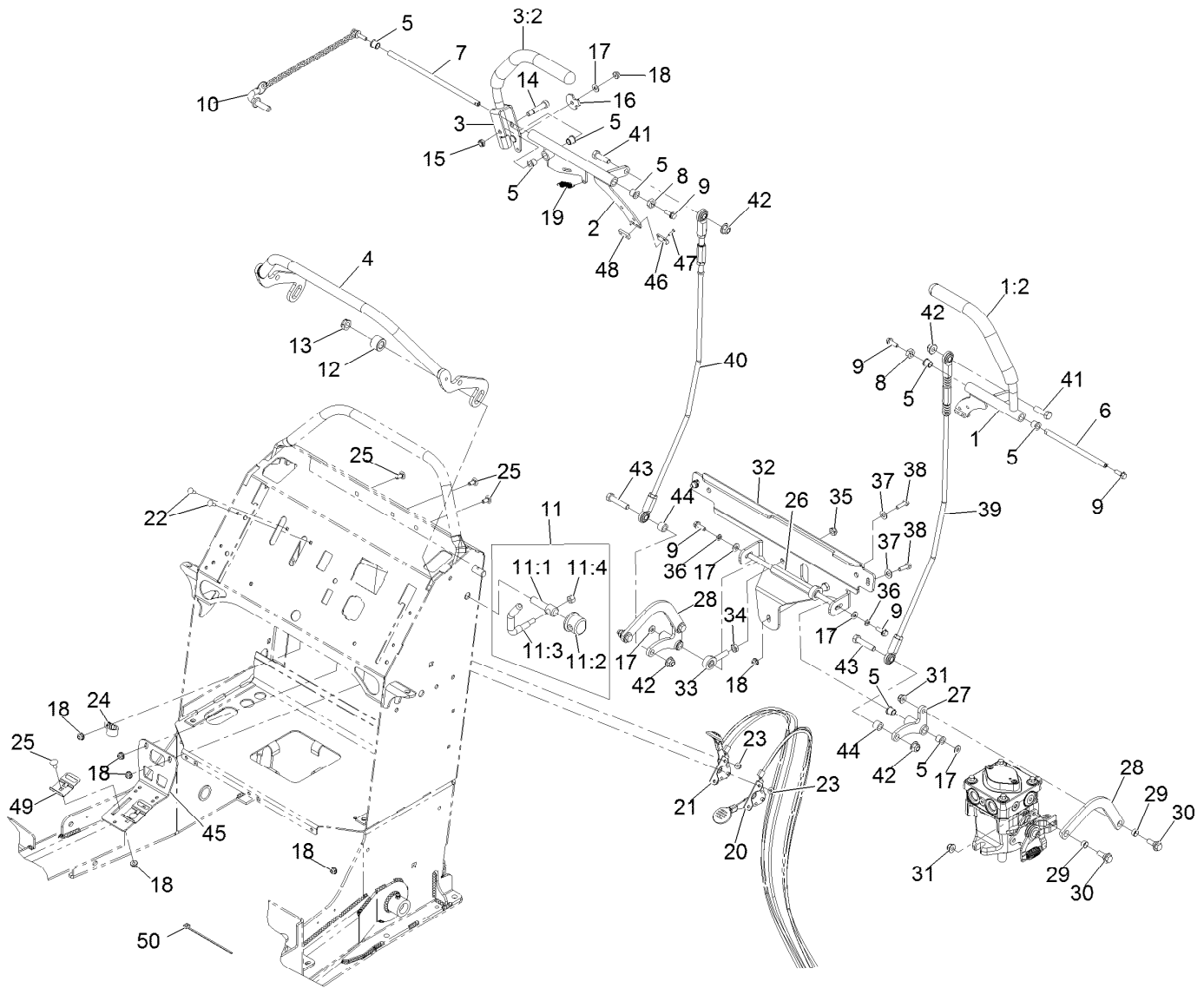
| Ref. | Part Number | Qty. | Description             |
|------|-------------|------|-------------------------|
| 1    | 1-000119    | 1    | Seal Kit                |
| 1:1  |             | 1    | Ring-Back Up ●          |
| 1:2  |             | 1    | Seal-Commutator ●       |
| 1:3  |             | 1    | Seal-Shaft (Viton) ●    |
| 1:4  |             | 1    | Washer-Back Up, Steel ● |
| 1:5  |             | 5    | Ring-Seal (Viton) ●     |
| 1:7  |             | 1    | Seal-Dirt And Water ●   |
| 2    | 3257-8      | 1    | Key-Woodruff            |
| 3    | 106-5549    | 6    | Bolt-Special            |
| 4    | 106-8764    | 1    | Shaft-Coupling          |

● Not serviced separately



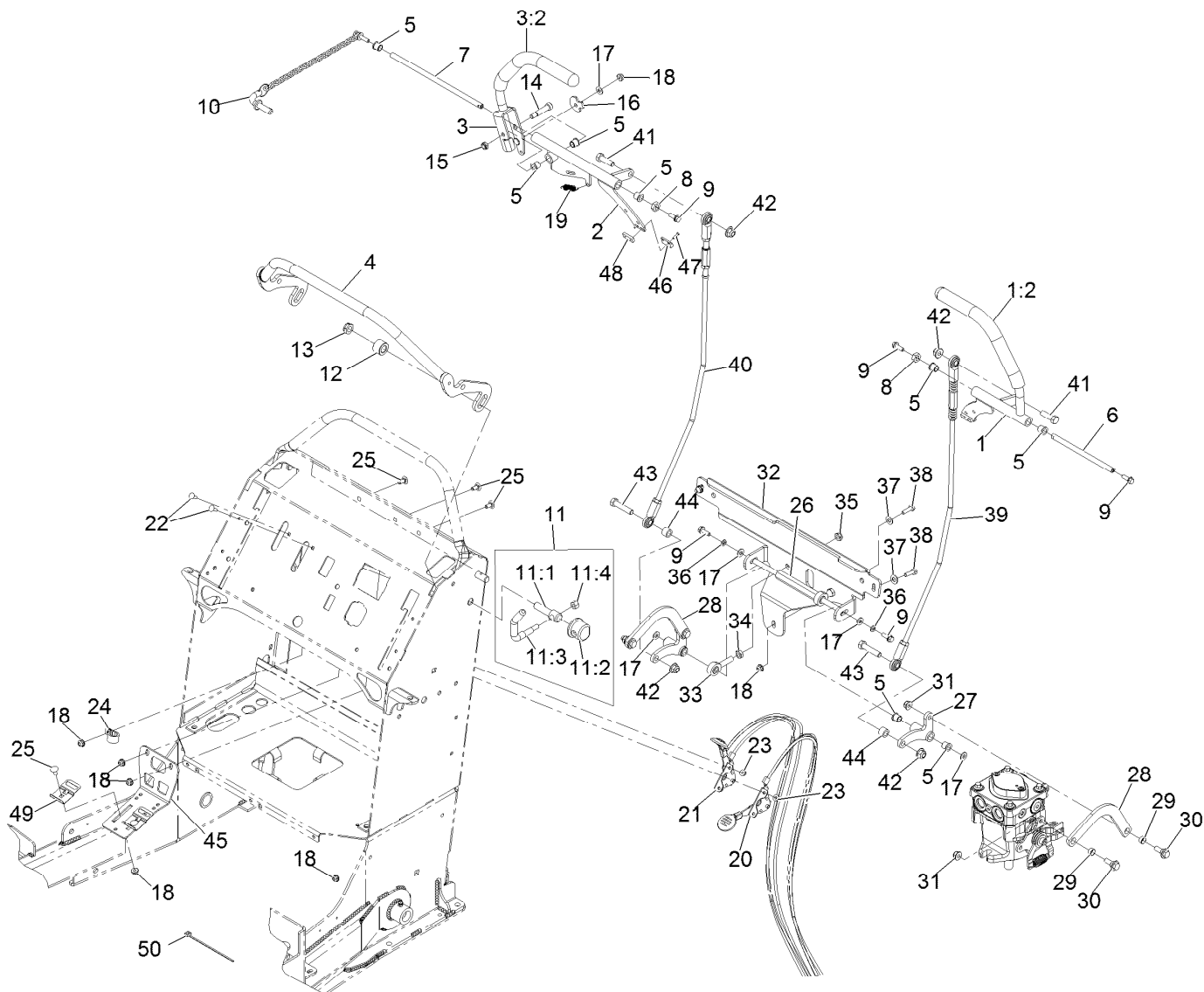
## Pump Idler Assembly No. 117-7685

| Ref. | Part Number | Qty. | Description                |
|------|-------------|------|----------------------------|
| 1    | 117-7684    | 1    | Idler Plate ASM            |
| 2    | 1-413088    | 1    | Spacer                     |
| 3    | 114-0463    | 2    | Washer-Friction, Composite |
| 4    | 116-7599    | 1    | Hub, Idler                 |
| 5    | 3256-24     | 3    | Washer-3/8 Sae             |
| 6    | 323-13      | 1    | Screw-HH 3/8-16 X 2 3/4    |
| 7    | 110-9981    | 1    | Washer-Plain               |
| 8    | 104-8301    | 2    | Nut-Nyloc 3/8-16 Flg       |
| 9    | 93-1622     | 1    | Pulley-Idler               |
| 10   | 323-9       | 1    | Screw-HH 3/8-16 X 1 3/4    |



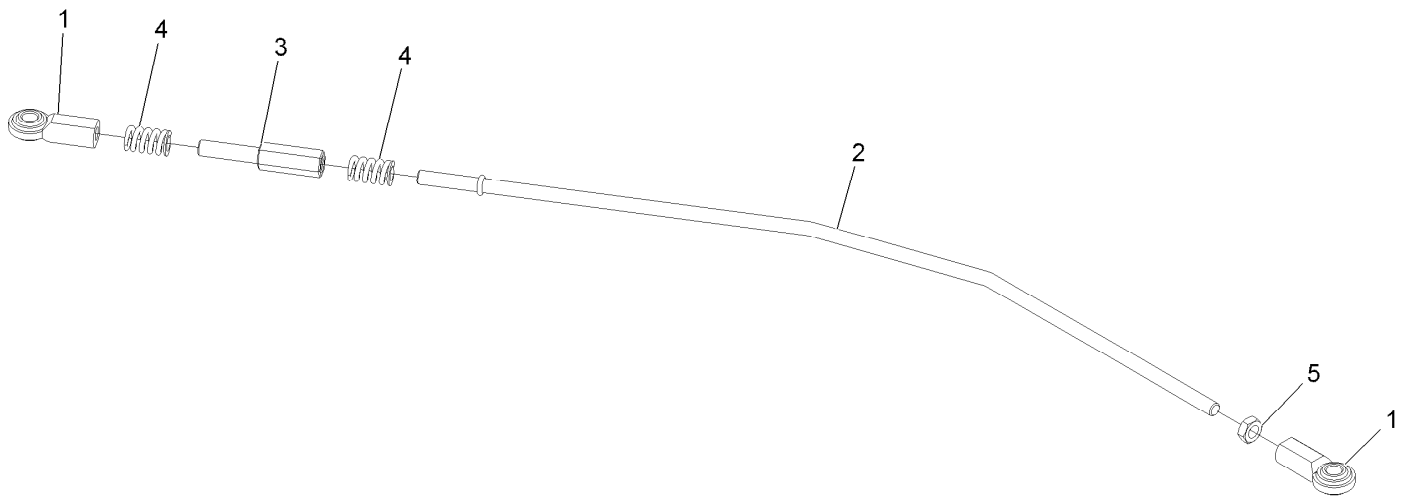
## Control Assembly

| Ref. | Part Number | Qty. | Description                     | Ref. | Part Number | Qty. | Description                      |
|------|-------------|------|---------------------------------|------|-------------|------|----------------------------------|
| 1    | 116-4970    | 1    | Lever ASM, LH                   | 14   | 114-0239    | 1    | Screw-Shoulder 5/16-18 X 1/2     |
| 1:2  | 116-2357    | 1    | Grip-Handle, Control            | 15   | 3296-47     | 1    | Nut-Nyloc 5/16-18 Thin           |
| 2    | 116-4972-03 | 1    | Motion Control ASM-RH           | 16   | 114-0268    | 1    | Cam-Lever                        |
| 3    | 116-2356    | 1    | Lever ASM, RH                   | 17   | 3256-22     | 5    | Washer-1/4 Sae                   |
| 3:2  | 116-2357    | 1    | Grip-Handle, Control            | 18   | 104-7201    | 9    | Nut-Nyloc 1/4-20 Flg             |
| 4    | 116-6985-03 | 1    | Tube ASM, Front Speed Control [ | 19   | 114-0249    | 1    | Spring-Extension                 |
| 5    | 103-9928    | 10   | Bearing                         | 20   | 116-4276    | 1    | Control-Throttle                 |
| 6    | 116-4978    | 1    | Shaft-Pivot, Motion Control     | 21   | 116-4277    | 1    | Control-Choke                    |
| 7    | 116-4979    | 1    | Shaft-Pivot, Motion Control     | 22   | 1-807533    | 4    | Bolt-Carriage #10-24 X 5/8       |
| 8    | 116-4198    | 2    | Spacer-Drive Lever Shaft        | 23   | 32128-17    | 4    | Nut-Lock, Flange                 |
| 9    | 117-8304    | 5    | Screw-Hex Flange 1/4-20 X 3/4   | 24   | 2412-87     | 1    | Clamp-Cable                      |
| 10   | 114-0409    | 1    | HOC Pin ASM                     | 25   | 3229-11     | 5    | Bolt-Carriage 1/4-20 X 5/8       |
| 11   | 107-1664    | 2    | Lever ASM                       | 26   | 116-3119    | 1    | Shaft-Bellcrank Pivot            |
| 11:1 | 106-3239    | 1    | Screw-Lock                      | 27   | 116-4975    | 2    | Bellcrank-Control, Motion        |
| 11:2 | 107-1644    | 1    | Cap-Lock                        | 28   | 116-4973    | 2    | Link-Bellcrank, Pump             |
| 11:3 | 106-3241    | 1    | Lever-Lock                      | 29   | 116-4976    | 4    | Bushing-Sleeve                   |
| 11:4 | 3296-29     | 1    | Nut-Nyloc 5/16-18               | 30   | 116-2670    | 4    | Screw-Shoulder HHF 5/16-18 X .96 |
| 12   | 116-2319    | 2    | Spacer-Clamp                    | 31   | 104-8300    | 4    | Nut-Nyloc 5/16-18 Flg            |
| 13   | 3296-45     | 2    | Nut-Nyloc 1/2-13 Thin           | 32   | 116-3202-03 | 1    | Bracket-Bellcrank                |



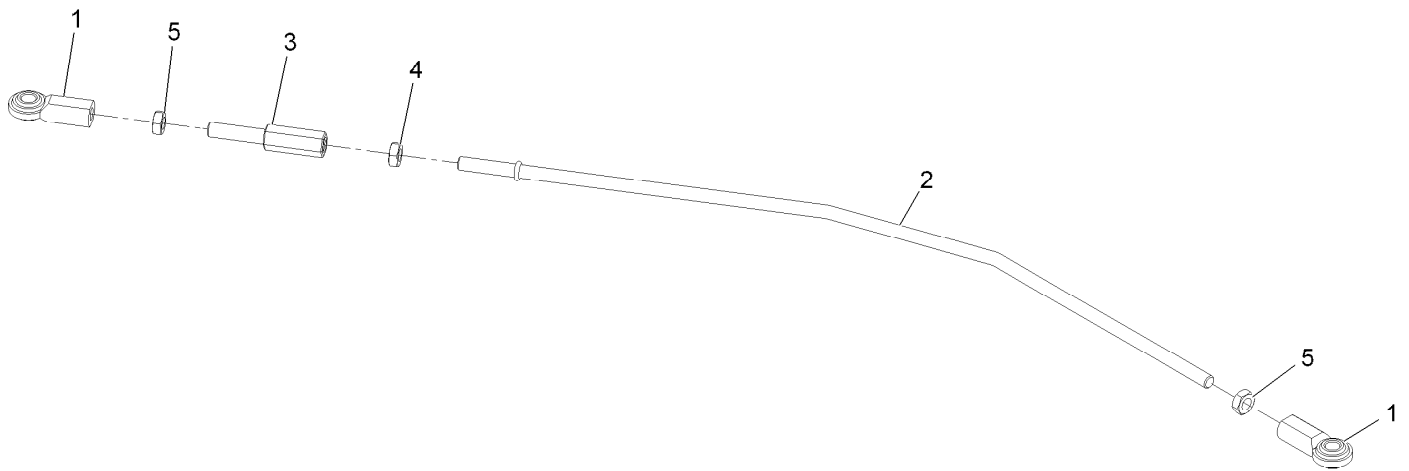
## Control Assembly (continued)

| Ref. | Part Number | Qty. | Description                  | Ref. | Part Number | Qty. | Description                  |
|------|-------------|------|------------------------------|------|-------------|------|------------------------------|
| 33   | 1-613204    | 2    | Balljoint                    | 42   | 104-8301    | 4    | Nut-Nyloc 3/8-16 Flg         |
| 34   | 3220-3      | 2    | Nut-Jam 3/8-24               | 43   | 323-9       | 2    | Screw-HH 3/8-16 X 1 3/4      |
| 35   | 3296-5      | 2    | Nut-Nyloc 3/8-24 Thin        | 44   | 52-2480     | 2    | Spacer-Wheel                 |
| 36   | 3253-3      | 2    | Washer-Lock 1/4              | 45   | 116-4572    | 1    | Bracket, Reed Switch         |
| 37   | 3256-23     | 3    | Washer-5/16 Sae              | 46   | 116-2832    | 2    | Actuator-Switch, Reed        |
| 38   | 321-5       | 3    | Screw-HH 1/4-20 X 7/8        | 47   | 116-3330    | 4    | Screw-HH #4-40 X 1/2 W/Nylon |
| 39   | 116-4936    | 1    | Linkage-Tracking Control, LH | 48   | 116-3227    | 2    | Plate-Tapped                 |
| 40   | 116-4937    | 1    | Linkage-Tracking Control, RH | 49   | 116-4573    | 2    | Clamp, Reed Switch           |
| 41   | 323-7       | 2    | Screw-HH 3/8-16 X 1 1/4      | 50   | 3290-378    | 1    | Tie-Cable                    |



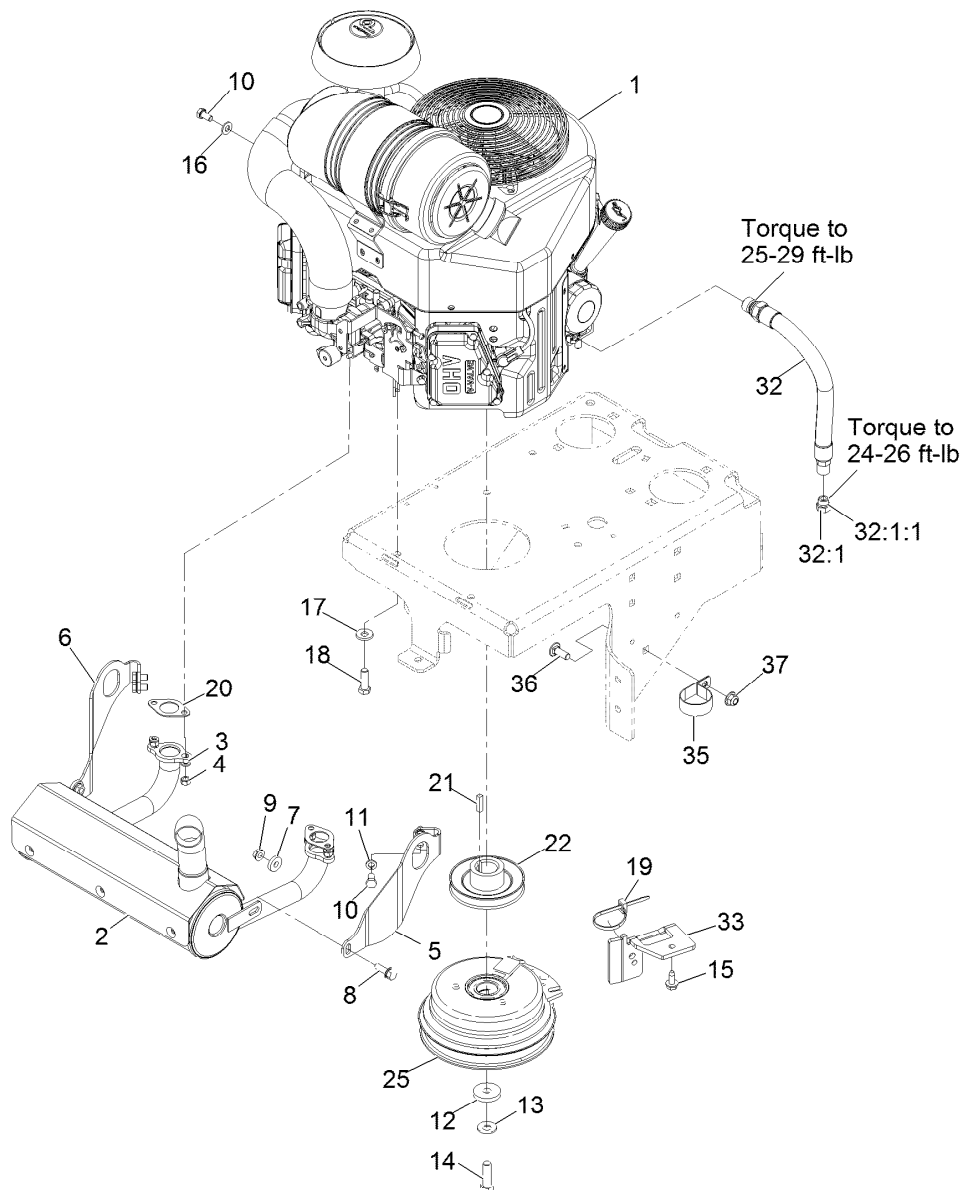
## LH Tracking Control Linkage Assembly No. 116-4936

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>        |
|-------------|--------------------|-------------|---------------------------|
| 1           | 103-0608           | 2           | Balljoint                 |
| 2           | 116-4938           | 1           | Link-Lower,Motion Control |
| 3           | 116-4755           | 1           | Rod-Adjustment            |
| 4           | 116-7560           | 2           | Spring-Compression        |
| 5           | 3220-3             | 1           | Nut-Jam 3/8-24            |



## RH Tracking Control Linkage Assembly No. 116-4937

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>        |
|-------------|--------------------|-------------|---------------------------|
| 1           | 103-0608           | 2           | Balljoint                 |
| 2           | 116-4938           | 1           | Link-Lower,Motion Control |
| 3           | 116-4755           | 1           | Rod-Adjustment            |
| 4           | 3220-16            | 1           | Nut-Jam 3/8-24 LH         |
| 5           | 3220-3             | 2           | Nut-Jam 3/8-24            |



## Engine Assembly

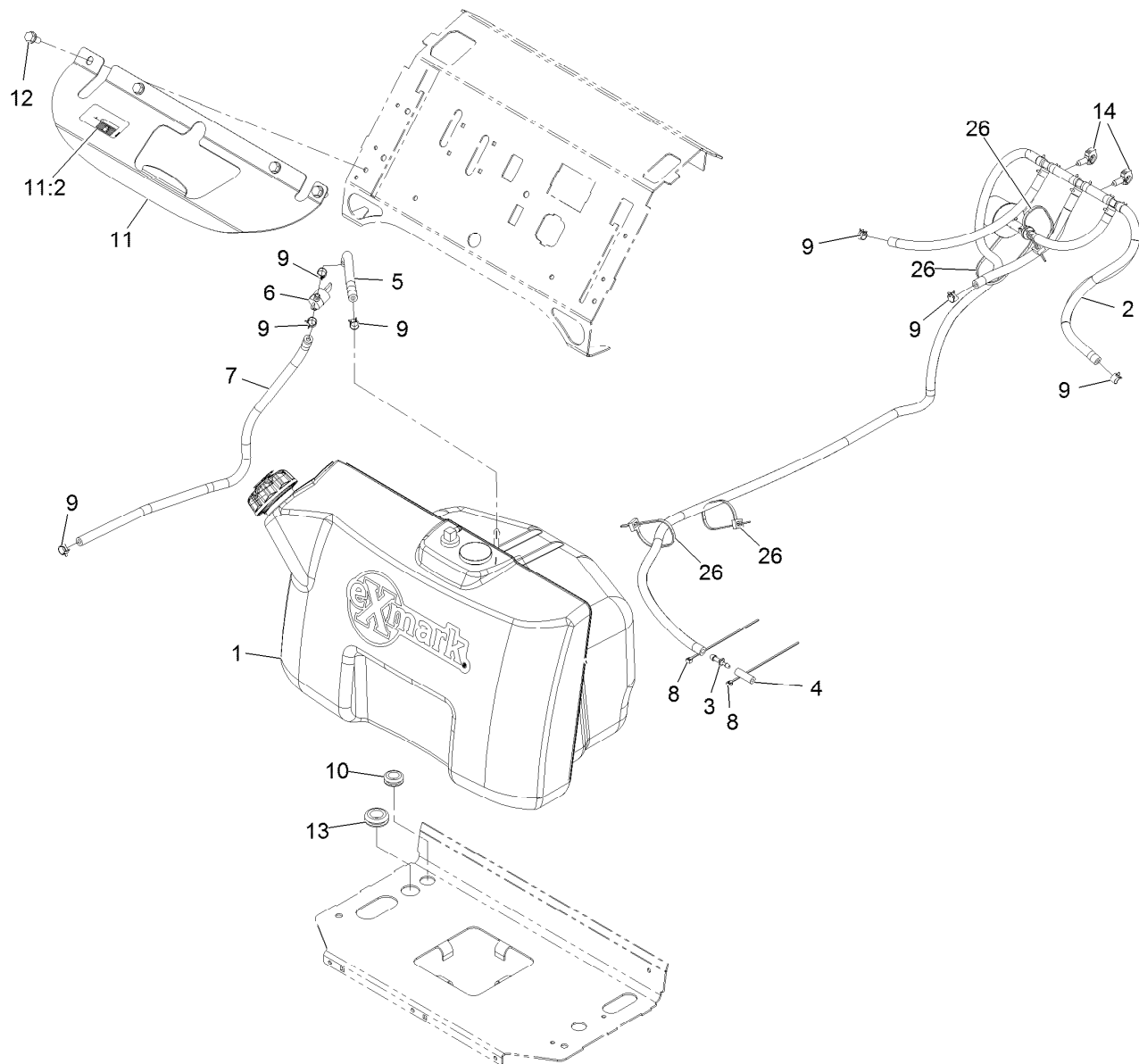
| Ref. | Part Number | Qty. | Description                |
|------|-------------|------|----------------------------|
| 1    |             | 1    | Engine Kawasaki ●■         |
| 2    | 116-8747    | 1    | Muffler, Kawasaki, 22-26   |
| 3    | 114-3550    | 4    | Washer-Lock, Spring        |
| 4    | 114-3549    | 4    | Nut-M8                     |
| 5    | 116-2353    | 1    | Bracket-Muffler Mount, LH  |
| 6    | 116-2354    | 1    | Bracket-Muffler Mount, RH  |
| 7    | 104-7658    | 2    | Spacer                     |
| 8    | 3234-29     | 2    | Screw-HH Flg 5/16-18 X 1   |
| 9    | 32128-25    | 2    | Nut-Hex 5/16-18 Side Lock  |
| 10   | 33114-016   | 5    | Screw-HH M8-1.25 X 16Mm    |
| 11   | 3253-4      | 4    | Washer-Lock 5/16           |
| 12   | 107-4136    | 1    | Washer                     |
| 13   | 1-603610    | 1    | Washer-Spring Disc 7/16    |
| 14   | 3212-6      | 1    | Screw-HH 7/16-20 X 1 1/2 ▲ |
| 15   | 32144-70    | 1    | Screw-HWH 5/16-18 X 3/4 Tf |

| Ref.   | Part Number | Qty. | Description                              |
|--------|-------------|------|------------------------------------------|
| 16     | 33094-00    | 1    | Washer                                   |
| 17     | 98-5975     | 4    | Washer-Spring Disc 3/8                   |
| 18     | 323-7       | 4    | Screw-HH 3/8-16 X 1 1/4                  |
| 19     | 3290-378    | 1    | Tie-Cable                                |
| 20     | 1-653313    | 2    | Gasket-Exhaust                           |
| 21     | 1-807259    | 1    | Key-Machine 1/4 X 1/4 X 1                |
| 22     | 116-3882    | 1    | Pulley                                   |
| 25     | 116-8517    | 1    | Clutch-200 Ft-Lb, 1.125 Bore - No D Driv |
| 32     | 116-4924    | 1    | Asm-Hose Oil Drain W/Plug                |
| 32:1   | 353-508     | 1    | Plug-W/O-Ring                            |
| 32:1:1 | 237-42      | 1    | O-Ring                                   |
| 33     | 116-3811-01 | 1    | Bracket-Anchor, Clutch                   |
| 35     | 2412-147    | 1    | Clamp                                    |
| 36     | 3231-22     | 1    | Bolt-Carriage 3/8-16 X 1                 |
| 37     | 104-8301    | 1    | Nut-Nyloc 3/8-16 Flg                     |

● Not serviced separately

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

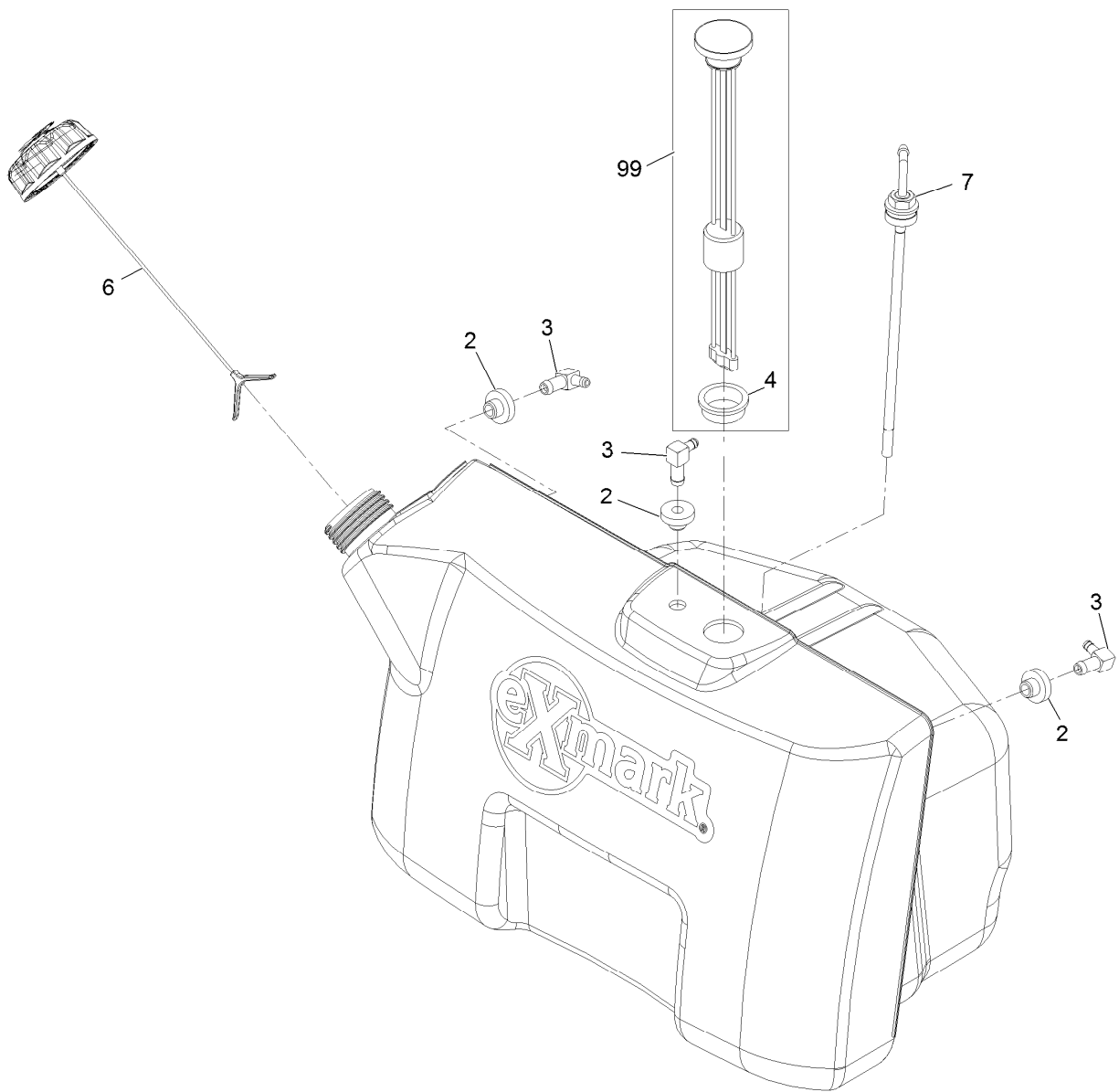
■ Obtain parts from [www.kawpowerepc.com](http://www.kawpowerepc.com)



## Fuel Assembly

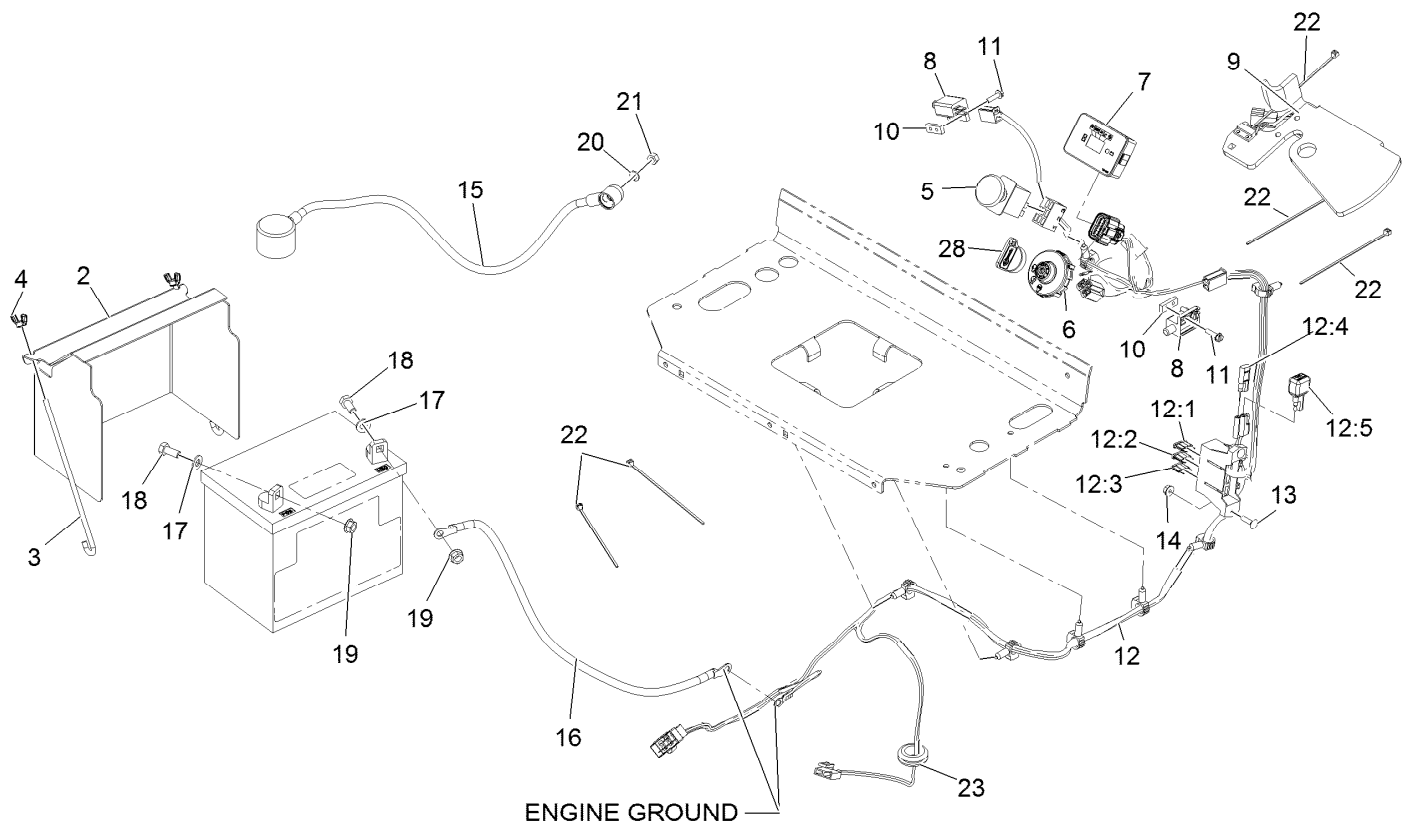
| Ref. | Part Number | Qty. | Description             |
|------|-------------|------|-------------------------|
| 1    | 116-4577    | 1    | Tank ASM- Exmark        |
| 2    | 116-5096    | 1    | Vent ASM                |
| 3    | 116-5072    | 1    | Fitting-Straight        |
| 4    | 115-3392    | 1    | Hose                    |
| 5    | 107-9297    | 1    | Hose-Fuel               |
| 6    | 1-603770    | 1    | Valve-Fuel              |
| 7    | 109-0301    | 1    | Hose-Fuel               |
| 8    | 1-303287    | 2    | Tie-Cable 5 1/2 (Small) |
| 9    | 2412-98     | 7    | Clamp-Hose              |

| Ref. | Part Number | Qty. | Description                |
|------|-------------|------|----------------------------|
| 10   | 112-7069    | 1    | Grommet                    |
| 11   | 116-3088    | 1    | Bracket-Tank               |
| 11:2 | 116-3290    | 1    | Decal-Fill, Fuel           |
| 12   | 32144-70    | 4    | Screw-HWH 5/16-18 X 3/4 Tf |
| 13   | 117-2781    | 1    | Grommet                    |
| 14   | 32180-040   | 2    | Clip-Harness               |
| 26   | 3290-378    | 4    | Tie-Cable                  |



## Fuel Tank Assembly No. 116-4577

| Ref. | Part Number | Qty. | Description                        |
|------|-------------|------|------------------------------------|
| 2    | 46-6560     | 3    | Bushing                            |
| 3    | 1-643172    | 3    | Elbow-90 DEG                       |
| 4    | 95-8972     | 1    | Grommet                            |
| 6    | 116-1704    | 1    | Cap-Fuel, Ratcheting               |
| 7    | 116-3408    | 1    | Fitting-Fuel, Bulkhead             |
| 99   | 116-7264    | 1    | Kit, Vantage Fuel Gage Replacement |



## Electrical Assembly

| Ref. | Part Number | Qty. | Description            |
|------|-------------|------|------------------------|
| 2    | 117-0543-01 | 1    | Cover-Battery          |
| 3    | 1-633651    | 2    | Bolt-Holddown          |
| 4    | 1-543792    | 2    | Wingnut-Nyloc 1/4-20   |
| 5    | 114-0279    | 1    | Switch-PTO             |
| 6    | 117-2222    | 1    | Switch-Ignition        |
| 7    | 117-3886    | 1    | Module-Hour Meter      |
| 8    | 1-513152    | 2    | Switch-N.C.            |
| 9    | 116-2833    | 1    | Harness-Switch, Reed   |
| 10   | 1-633181    | 2    | Plate-Tapped           |
| 11   | 32105-13    | 4    | Screw-HWH #10-24 X 3/4 |
| 12   | 116-4615    | 1    | Harness-Wire ●         |
| 12:1 | 109103      | 1    | Fuse-Blade, 30 Amp     |
| 12:2 | 109102      | 1    | Fuse-Blade, 25 Amp     |
| 12:3 | 218-578     | 1    | Fuse-Blade, 10 Amp     |

| Ref. | Part Number | Qty. | Description             |
|------|-------------|------|-------------------------|
| 12:4 | 116-0053    | 1    | Cap-Plug                |
| 12:5 | 103-3895    | 1    | Diode-Tvs               |
| 13   | 3229-20     | 2    | Screw-CARR              |
| 14   | 3290-148    | 2    | Nut-Whizlock #10-24     |
| 15   | 115-3864    | 1    | Cable-Battery, Positive |
| 16   | 105-0836    | 1    | Cable-Battery, Black    |
| 17   | 3256-23     | 2    | Washer-5/16 Sae         |
| 18   | 322-3       | 2    | Screw-HH 5/16-18 X 3/4  |
| 19   | 109-5715    | 2    | Nut-Hex Flange 5/16-18  |
| 20   | 3253-3      | 1    | Washer-Lock 1/4         |
| 21   | 3217-5      | 1    | Nut-Hex 1/4-20          |
| 22   | 1-303287    | 5    | Tie-Cable 5 1/2 (Small) |
| 23   | 117-2781    | 1    | Grommet                 |
| 28   | 103-2106    | 1    | Key-Exmark Logo         |

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

**Notes:**

**Notes:**

## MAXIMIZE THE PERFORMANCE OF YOUR EXMARK.

### **4-CYCLE PREMIUM ENGINE OIL**

Part No. 116-3373

Both SAE 30 and SAE 10W-30 in one bottle.

Contains increased levels of zinc and phosphorus for better lubricity.

No Viscosity Index Improvers that tend to shear down in high heat.

Synthetic formulation.

Gas & Diesel compatible.

Anti-corrosion additives.

API 'SL' and JASO rated with wet clutch compatibility for other machines.

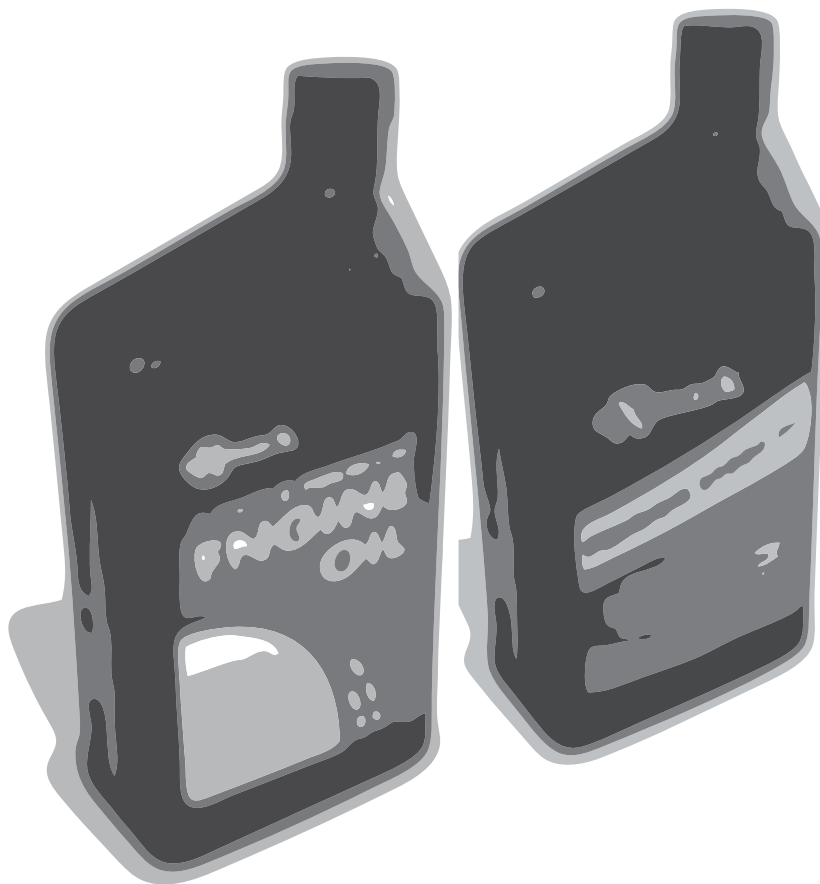
### **PREMIUM HYDRO OIL**

Part No. 109-9828

Commercial quality for tough, high-heat conditions.

Designed specifically for zero-turn mower hydraulic systems.

Superior shear resistance under heavy loads.



Available from your local Exmark dealer. Find your closest dealer at [exmark.com](http://exmark.com)

## EXMARK ACCESSORIES AND OPTIONS\*

### MID-MOUNT RIDING ACCESSORIES AND OPTIONS

|                                    |                                 |
|------------------------------------|---------------------------------|
| 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

Model No. \_\_\_\_\_

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

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

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

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

© 2013 Exmark Mfg. Co., Inc.  
Industrial Park Box 808  
Beatrice, NE 68310  
All Rights Reserved

Part No. 4501-445 Rev. A  
(402) 223-6300  
Fax (402) 223-5489  
Printed in the USA.



\* 4 5 0 1 - 4 4 5 \* A

[www.exmark.com](http://www.exmark.com)