# Hustler Sport Parts Manual



Hustler Turf Equipment

••••

P.O. Box 7000

•••

Hesston, Kansas

•

67062-2097



### **WARNING:**



The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

**IMPORTANT:** This engine is not equipped with a spark arrester muffler. It is a violation of California Public Resource Code Section 4442 to use or operate this engine on any forest-covered, brush-covered, or grass-covered unimproved land. Other states or federal areas may have similar laws.

This spark ignition system complies with Canadian ICES-002.

The Engine Owner's Manual provides information regarding the U.S. Environmental Protection Agency (EPA) and the California Emission Control Regulation of emission systems, maintenance and warranty.

Keep Engine Owner's Manual with your unit. Should the Engine Owner's Manual become damaged or illegible, replace immediately. Replacements may be ordered per the information found in the Product Information section of the owner's manual.

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### **Chapter 1**

### **General Information**

This Manual covers Hustler Sport models 929125 and 929133.

### Frequently Ordered Parts

| PART NO. | DESCRIPTION                     | PART NO. | DESCRIPTION                         |
|----------|---------------------------------|----------|-------------------------------------|
| 769133   | Pump Drive Belt                 | 601849   | Filter, Air Flat Panel, 21 HP       |
| 600726   | Deck Belt 42"                   | 786970   | Fuel Filter Briggs and Stratton     |
| 771634   | Deck Belt 48"                   | 601845   | Engine Oil Filter Briggs & Stratton |
| 601846   | Filter, Air Precleaner, 17.5 HP | 601123   | BLADE, 16.50"-L-F-CW                |
| 601847   | Filter, Air Flat Panel, 17.5 HP | 793794   | BLADE,20.50"-L-F-CW                 |
| 601848   | Filter, Air Precleaner, 21 HP   |          |                                     |

### Options Available From Your Dealer

| PART NO. | DESCRIPTION              |
|----------|--------------------------|
| 929216   | Catcher, 2-Bag 42" Sport |
| 929224   | Catcher, 2-Bag 48" Sport |
| 110737   | Kit, Lights LED Sport    |

### Service Literature

| PART NO. | DESCRIPTION                            |
|----------|--|
| 111061   | Hustler Sport Owner's Manual           |
| 601865   | Briggs & Stratton 17.5 HPEngine Manual |
| 601866   | Briggs & Stratton 21 HP Engine Manual  |

*Note:* When ordering parts, you must use the part number as shown for each part, not the item number. Always give the model and serial number to your parts and service representative.

Note: Items sold in bulk such as seals and hoses are sold by the foot.

#### Using this manual

Illustrations used were current at the time of printing, but subsequent production changes may cause your machine to vary slightly in detail. Excel Industries, Inc. reserves the right to redesign and change the machine as deemed necessary, without notification. If a change has been made to your machine which is not reflected in this parts manual, see your Hustler dealer for current information and parts.

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### **Hardware Description Codes & Abbreviations**

The following codes are used throughout this parts manual. Refer to this list when ordering parts.

| ABBREVIATION | DESCRIPTION   | ABBREVIATION | DESCRIPTION            |
|--------------|---------------|--------------|------------------------|
| СВ           | Carriage Bolt | MB           | Machine Bushing        |
| CE           | Clevis Pin    | MS           | Machine Screw          |
| CP           | Cotter Pin    | NT           | Nut                    |
| CN           | Clip Nut      | SC           | Self Tapping Cap Screw |
| CS           | Cap Screw     | SH           | Socket Head            |
| CW           | Cup Washer    | SB           | Shoulder Bolt          |
| FDRW         | Fender Washer | SS           | Set Screw              |
| FW           | Flat Washer   | OD           | Outside Diameter       |
| HX           | Hex Head      | ID           | Inside Diameter        |
| LW           | Lock Washer   |              |                        |

### **Standard Torques**

The following chart lists the standard torque values for the threaded fasteners found in this manual. Torque all cap screws, nuts and set screws to these values unless a different torque is shown in the Notes section next to the fastener

| SIZE | FT-LBS | NM   | SIZE | FT-LBS | NM   |
|------|--------|------|------|--------|------|
|      |        |      |      |        |      |
| .250 | 8.2    | 11.1 | M3   | 1      | 1.3  |
| .312 | 17     | 23   | M4   | 2.2    | 3    |
| .375 | 30     | 40   | M5   | 4.5    | 6.1  |
| .438 | 48     | 65   | M6   | 7.7    | 10.4 |
| .500 | 73     | 99   | M8   | 18.5   | 25   |
| .562 | 105    | 143  | M10  | 37     | 50   |
| .625 | 145    | 200  | M12  | 64     | 87   |
| .750 | 260    | 350  | M16  | 160    | 215  |
| .875 | 420    | 565  | M20  | 320    | 435  |
| 1.00 | 625    | 850  | M24  | 555    | 750  |

#### **NOTE:**

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Loctite 592 to be used on all pipe threads. Lubricate all grease zerks.

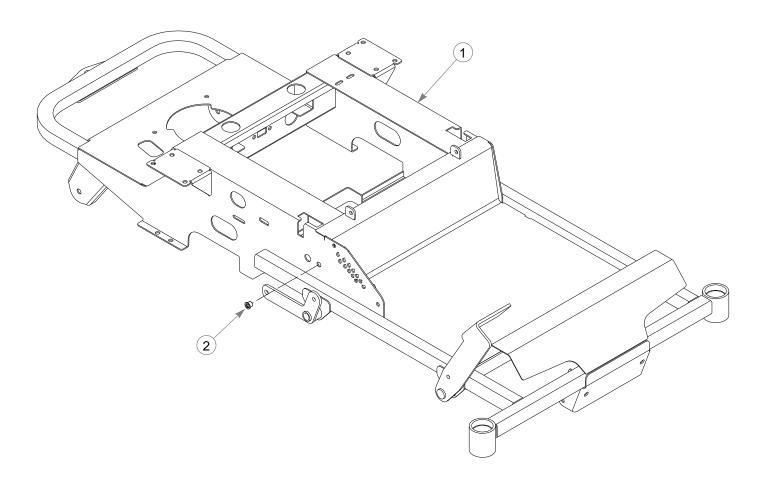
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| Mivot Hat installation |     | _  |

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# **Rivet Nut Installation**



|   | ITEM<br>NO. | SERVICE<br>PART NO. | MFG. PART<br>NO. | QTY. | DESCRIPTION               |
|---|-------------|---------------------|------------------|------|---------------------------|
| 1 | 1           | 549873              | 110073           | 1    | 42" SPORT FRAME           |
|   |             | 549881              | 110099           | 1    | 48" SPORT FRAME           |
|   | 2           | 808485              | 808485           | 1    | RIVET NUT, 5/16-18 THREAD |

### NOTES:

1. Service part includes Item 2 and decals (Page 8-2)

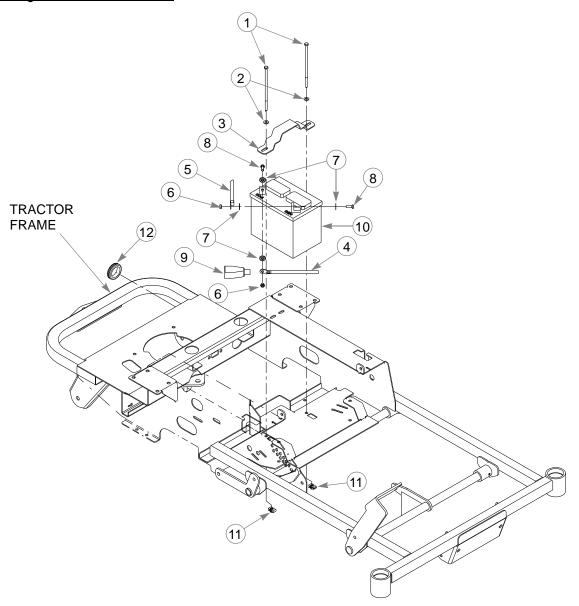
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# **Battery Installation**



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### **Battery Installation**

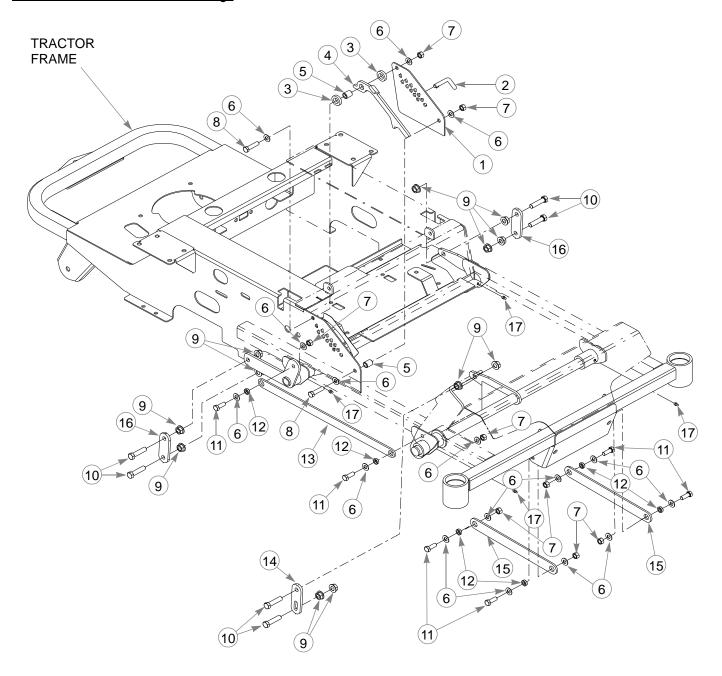
| =   |    | SERVICE<br>PART NO. F | MFG.<br>PART NO. | QTY | DESCRIPTION                 |
|-----|----|-----------------------|------------------|-----|-----------------------------|
|     | 1  | 601930                | 601930           | 2   | CS .250-20 X 6.50 HX G5     |
|     | 2  | 768515                | 768515           | 2   | FW .281 X .625 X .051/.080H |
|     | 3  | 348417                | 348417           | 1   | BATTERY CLAMP STRAP         |
|     | 4  | 601062                | 601062           | 1   | BATTERY CABLE, POS.         |
|     | 5  | 601841                | 601841           | 1   | BATTERY CABLE, NEGATIVE     |
|     | 6  | 024927                | 024927           | 2   | NT .250-20 HX GR.5 ZNYC     |
|     | 7  | 029868                | 029868           | 4   | LW .250 INT-EXT TOOTH ZN    |
|     | 8  | 055939                | 055939           | 2   | CS .250-20 X .750 HX G5 ZN  |
|     | 9  | 771428                | 771428           | 1   | BATTERY CBL BOOT-RED        |
| 2 1 | 10 | 740696                | 740696           | 1   | BATTERY                     |
|     | 11 | 601982                | 601982           | 2   | CN .250-20X.150 MAX THK     |
|     | 12 | 794644                | 794644           | 1   | GM 1.50 X 2.12 X 1.75       |

#### **NOTES:**

- 1. When performing service on mower, disconnect battery ground cable and black wire of harness and do not reconnect to battery until engine is ready to be started. See Owners Manual.
- 2. Battery is not installed in export models. Hardware used for fastening battery cables to battery to be installed and tightened to battery cables. Battery clamp strap and associated hardware to be installed as shown with capscrews (Items 1) bottomed out on threads of clip nuts (Items 11).

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## **Deck Lift Assembly**



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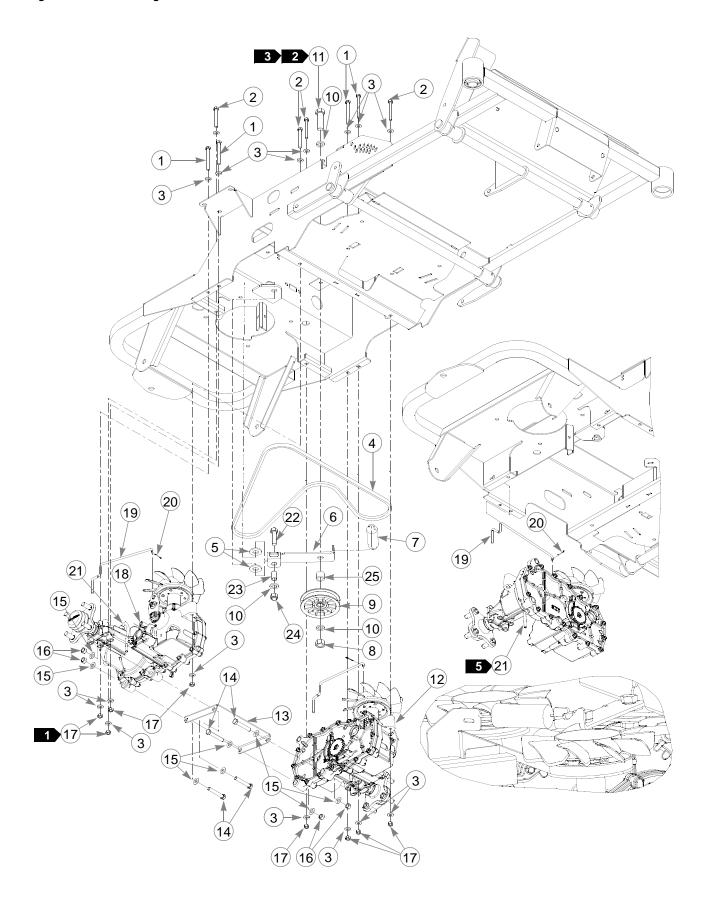
# Deck Lift Assembly

| ITEM<br>NO. | SERVICE<br>PART NO. | MFG.<br>PART NO. | QTY | DESCRIPTION              |
|-------------|---------------------|------------------|-----|--------------------------|
| 1           | 110282              | 110282           | 1   | DECK ADJUSTMENT PLATE LH |
| 2           | 601963              | 601963           | 1   | PIN, DECK HEIGHT STOP    |
| 3           | 769257              | 769257           | 2   | FW, 656X1.250X.250 ZNY   |
| 4           | 110829              | 110829           | 1   | HANDLE, DECK HT LOCK     |
| 5           | 348862              | 348862           | 2   | STEERLEVER BUSHING       |
| 6           | 767954              | 767954           | 16  | FW .406X.812X.060 SAE    |
| 7           | 054502              | 054502           | 8   | NT .375-16 HX GRD 5 ZNY  |
| 8           | 080655              | 080655           | 2   | CS .375-16X1.500 HX G5   |
| 9           | 704643              | 704643           | 12  | NT .437-14 HX FLG ZN     |
| 10          | 055749              | 055749           | 6   | CS .437-14X1.750 HX G5   |
| 11          | 036244              | 036244           | 6   | CS .375-16X1.000 HX G5   |
| 12          | 601839              | 601839           | 6   | PIVOT SPACER BUSHING     |
| 13          | 110884              | 110884           | 1   | LIFT PEDAL LINK, SPORT   |
| 14          | 110880              | 110880           | 1   | DECK LIFT LINK, SPORT    |
| 15          | 110879              | 110879           | 2   | PULLER STRAP, SPORT      |
| 16          | 110929              | 110929           | 2   | DECK LIFT LINK, NON-SLOT |
| 17          | 015495              | 015495           | 4   | GREASE FITTING STRAIGHT  |
|             |                     |                  |     |                          |

NOTES:

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## **Hydraulic System Installation**



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# **Hydro Transmission Installation**

| INDEX NO. | SERVICE<br>PART NO. | MFG. PART<br>NO. | QTY. | DESCRIPTION              |
|-----------|---------------------|------------------|------|--------------------------|
| 1         | 043067              | 043067           | 4    | CS .312-18X3.00 HX G5 Z  |
| 2         | 710087              | 710087           | 4    | CS .312-18X2.500 HX G5   |
| 3         | 768523              | 768523           | 16   | FW .343X.687X.051/.080H  |
| 4         | 769133              | 769133           | 1    | BELT, A 67.24" EL        |
| 5         | 602026              | 602026           | 2    | BEARING DISC             |
| 6         | 111079              | 111079           | 1    | PUMP IDLER, FORMED       |
| 7         | 036384              | 036384           | 1    | SPRING 1/4 COIL PL 1.23  |
| 8         | 016972              | 016972           | 1    | NT .625-11 HX G5 ZNYC    |
| 9         | 784827              | 784827           | 1    | PULLEY, IDLER, 4.00"OD,  |
| 10        | 028118              | 028118           | 3    | FW .625X1.00X.134 ZNYC   |
| 11        | 601983              | 601983           | 1    | CS .625-11 X 2.25 HXG5ZY |
| 12        | 601390              | 601390           | 1    | EZT, 19.2 LEFT TRANS     |
| 13        | 110042              | 110042           | 1    | HYDROSTAT CROSS BRACE    |
| 14        | 056036              | 056036           | 4    | CS .375-16X2.250 HX G5   |
| 15        | 767954              | 767954           | 8    | FW .406X .812 X.060 SAE  |
| 16        | 054502              | 054502           | 4    | NT .375-16 HX GRD 5 ZNY  |
| 17        | 034272              | 034272           | 8    | NT .312-18 HX G5 ZNYC    |
| 18        | 601391              | 601391           | 1    | EZT, 19.2 RIGHT TRANS    |
| 19        | 793174              | 793174           | 2    | TOWLINK ROD              |
| 20        | 048553              | 048553           | 2    | CP .062DX1.000 LG HML Z  |
| 21        | 601018              | N/A              | 2    | OVERFLOW HOSE            |
| 22        | 017616              | 017616           | 1    | CS .500-13X1.750 HX G5   |
| 23        | 602025              | 602025           | 1    | BUSHING, IGUS .500 I.D.  |
| 24        | 781567              | 781567           | 1    | NT .500-13 HX G8 ZY NL   |
| 25        | 601398              | 601398           | 1    | SPACER, SPORT IDLER      |

#### **NOTES:**

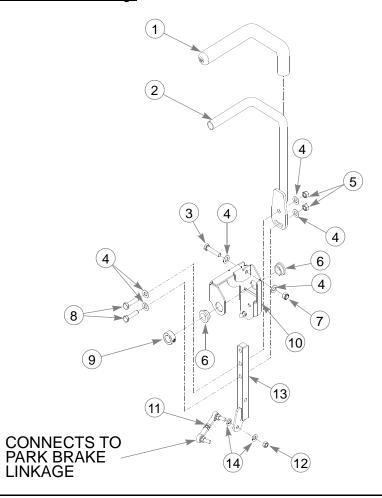
- 1. Torque to 17 ft-lbs.
- 2. Torque to 100 ft-lbs.
- 3. Service parts available for the transaxles:

| PART<br>NUMBER | DESCRIPTION              | PART<br>NUMBER | DESCRIPTION              |
|----------------|--------------------------|----------------|--------------------------|
| 788877         | AXEL NUT                 | 791723F        | FW .530 X 1.63 X .06 SLO |
| 601206         | EZT PULLEY KIT           | 788232         | HUB ASSEMBLY             |
| 601207         | PULLEY, 4.5", FST ZT2800 | 798363         | PARKING BRAKE GEAR       |
| 795039         | LEFT EZ VENT TUBE ASSY   | 795062         | RIGHT EZT VENT HOSE      |

4. Push all the slack in the transmission to rear and then tighten bolts.

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# **Steering Sub-Assembly**



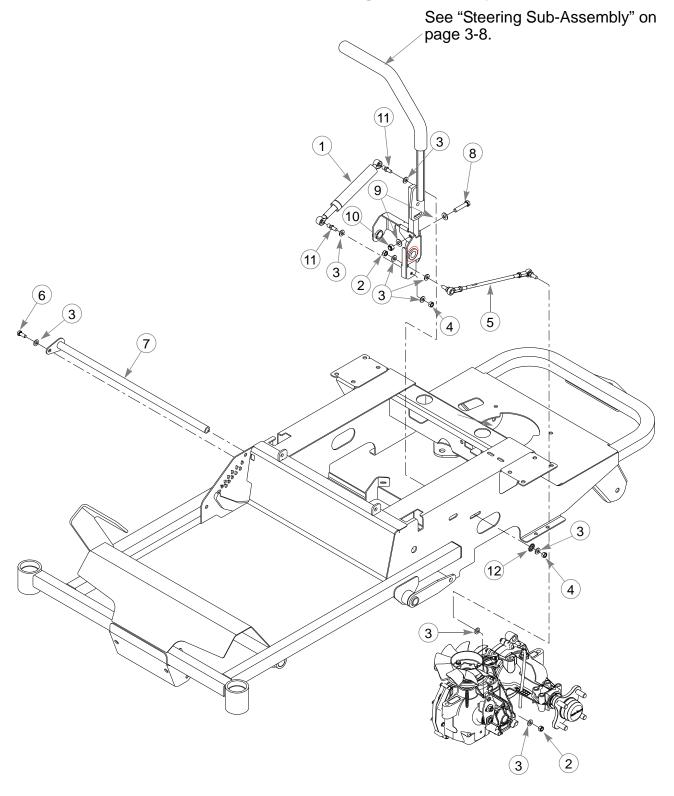
| ITEM NO. | SERVICE<br>PART NO. | MFG. PART<br>NO. | QTY. | DESCRIPTION              |
|----------|---------------------|------------------|------|--------------------------|
| 1        | 781260              | 781260           | 2    | GRIP, STEERING BAR       |
| 1 2      | 110370              | 110370           | 2    | STEERING BAR W/A         |
|          | 705178              | 705178           | 2    | CS .375-16X1.750 HX G5   |
| 4        | 767954              | 767954           | 2    | FW .406X .812 X.060 SAE  |
| 5        | 054502              | 054502           | 4    | NT .375-16 HX GRD 5 ZNY  |
| 6        | 770867              | 770867           | 4    | BUSHING, PLAS .750X1(FS) |
| 7        | 086660              | 086660           | 2    | NT .375-16 HXZY NL       |
| 8        | 080655              | 080655           | 4    | CS .375-16X1.500 HX G5   |
| 9        | 784439              | 784439           | 2    | LOCK COLLAR,0.757 ID(FS) |
| 10       | 110008              | 110008           | 1    | STEERING BOX LH (PLATED) |
|          | 110007              | 110007           | 1    | STEERING BOX RH (PLATED) |
| 11       | 796615              | 796615           | 2    | BALL JOINT LINK MINI FS  |
| 12       | 023655              | 023655           | 2    | NT .312-24 HXZY NL       |
| 13       | 110089              | 110089           | 2    | CONTROL LEVER W/A        |
| 14       | 768523              | 768523           | 4    | FW .343X.687X.051/.080H  |
|          |                     |                  |      |                          |

### NOTES:

1. Includes Item 1 (781260 Steering Bar Grip).

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# Steering Assembly

| ITEM<br>NO. | SERVICE<br>PART NO. | MFG.<br>PART NO. | QTY | DESCRIPTION             |
|-------------|---------------------|------------------|-----|-------------------------|
| 1           | 600221              | 600221           | 2   | DAMPER, STEERING        |
| 2           | 023655              | 023655           | 4   | NT .312-24 HXZY NL      |
| 3           | 768523              | 768523           | 12  | FW .343X.687X.051/.080H |
| 4           | 034272              | 034272           | 4   | NT .312-18 HX G5 ZNYC   |
| 5           | 600981              | 600981           | 2   | PUMP ROD ASSEMBLY       |
| 6           | 034280              | 034280           | 1   | CS .312-18X .750 HX G5  |
| 7           | 110014              | 110014           | 1   | PIVOT TUBE ASSEMBLY     |
| 8           | 705178              | N/A              | 2   | CS .375-16X1.750 HX G5  |
| 9           | 767954              | 767954           | 4   | FW .406X .812 X.060 SAE |
| 10          | 086660              | N/A              | 2   | NT .375-16 HXZY NL      |
| 11          | 781922              | 781922           | 4   | BALL STUD, DAMPER (FS)  |
| 12          | 029876              | 029876           | 2   | LW .312 INT-EXT TOOTH Z |

### NOTES:

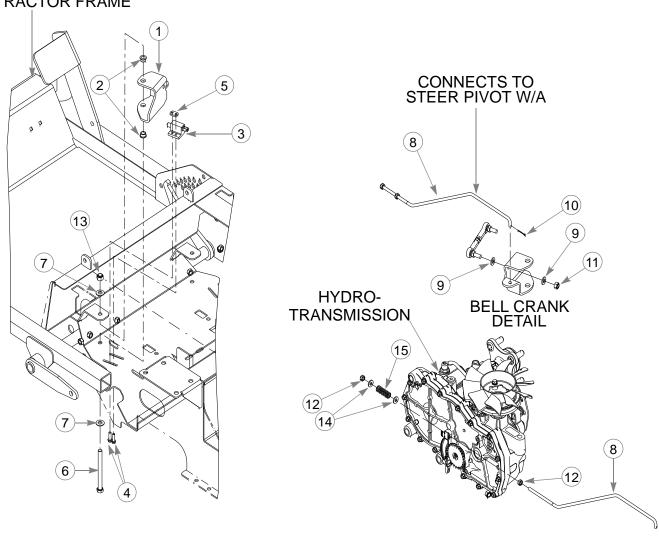
### 1. Service parts for Damper:

| PART<br>NUMBER | DESCRIPTION    |
|----------------|----------------|
| 601425         | CONNECTOR BODY |
| 601426         | CAP LOCK       |

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### Park Brake Assembly

TRACTOR FRAME



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# Park Brake Assembly

| ITEM<br>NO. | SERVICE<br>PART NO. | MFG.<br>PART NO. | QTY | DESCRIPTION             |
|-------------|---------------------|------------------|-----|-------------------------|
| 1           | 110001              | 110001           | 1   | BRAKE ACTUATOR LH       |
|             | 110000              | 110000           | 1   | BRAKE ACUTATOR RH       |
| 2           | 765339              | 765339           | 4   | BUSHING,IGUS#0608 (FS)  |
| 3           | 781211              | 781211           | 2   | SWITCH, PUSH BUTTON(FS) |
| 4           | 063198              | 063198           | 4   | CS 10-24X .750 HXFLK ZN |
| 5           | 601822              | 601822           | 2   | NUT PLATE, .420 CENTERS |
| 6           | 725796              | 725796           | 2   | CS .375-16X4.00 HX G8 Z |
| 7           | 767954              | 767954           | 4   | FW .406X .812 X.060 SAE |
| 8           | 110009              | 110009           | 2   | BRAKE ACTUATOR ROD      |
| 9           | 768523              | 768523           | 8   | FW .343X.687X.051/.080H |
| 10          | 048553              | 048553           | 2   | CP .062DX1.000 LG HML Z |
| 11          | 023655              | 023655           | 4   | NT .312-24 HXZY NL      |
| 12          | 068551              | 068551           | 4   | NT .250-20 HXZY NL      |
| 13          | 086660              | 086660           | 2   | NT .375-16 HXZY NL      |
| 14          | 768515              | 768515           | 4   | FW .281X.625X.051/.080H |
| 15          | 601131              | 601131           | 2   | SPRING, BRAKE ARM RET.  |

NOTES:

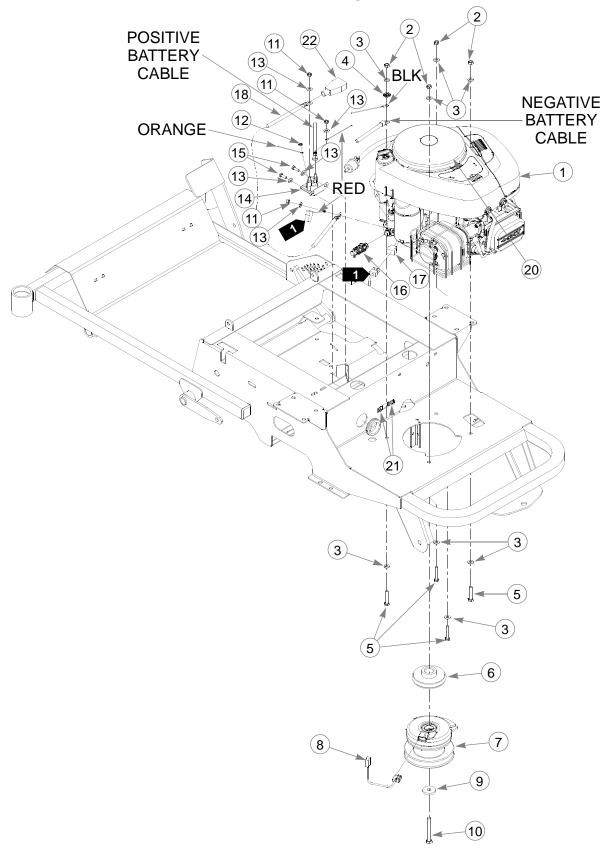
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### Briggs and Stratton 17.5 & 21 HP Engine Installation



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### Briggs and Stratton 17.5 & 21 HP Engine Installation

| ITEM<br>NO. | SERVICE<br>PART NO. | MFG.<br>PART NO. | QTY | DESCRIPTION                |
|-------------|---------------------|------------------|-----|----------------------------|
| 1           | 601800              | 601800           | 1   | ENGINE 17.5 HP BRIGGS      |
|             | 601850              | 601850           | 1   | ENGINE 21 HP BRIGGS        |
| 2           | 034272              | 034272           | 4   | NT .312-18 HX G5 ZNYC      |
| 3           | 768523              | 768523           | 8   | FW .343X.687X.051/.080H    |
| 4           | 029876              | 029876           | 1   | LW .312 INT-EXT TOOTH Z    |
| 5           | 052837              | 052837           | 4   | CS .312-18X1.750 HX G5     |
| 6           | 793760              | 793760           | 1   | PULLEY,ENGINE-HYDRO DRI    |
| 7           | 601801              | 601801           | 1   | CLUTCH WARNER I-5217-53    |
| 8           | 791251              | 791251           | 1   | HARNESS, CLUTCH PIGTAIL    |
| 9           | 763417              | 763417           | 1   | FW .454X1.50X.250          |
| 10          | 601834              | 601834           | 1   | CS .437-20 X 3.50 HX G5    |
| 11          | 024927              | 024927           | 3   | NT .250-20 HX GR.5 ZNYC    |
| 12          | 044255              | 044255           | 1   | NT #10-32 HX ZN            |
| 13          | 768515              | 768515           | 4   | FW .281X.625X.051/.080H    |
| 14          | 030817              | 030817           | 1   | STARTER SOLENOID HW KIT    |
| 15          | 055939              | 055939           | 2   | CS .250-20X .750 HX G5     |
| 16          | 601818              | 601818           | 1   | OIL DRAIN - 3/8-18 NPTF    |
| 17          | 601676              | 601676           | 1   | WIRE HARNESS, FST SPORT    |
| 18          | 601840              | 601840           | 1   | BATTERY CABLE, POS.        |
| 19          | 104786              | 104786           | 1   | OIL DRAIN HOSE (NOT SHOWN) |
| 20          | 601844              | 601844           | 1   | BRIGGS CONTACT COVER       |
| 21          | 601982              | 601982           | 2   | CN .250-20X .150 MAX THK   |
| 22          | 771428              | 771428           | 1   | BATTERY CBL BOOT-RED(FS)   |

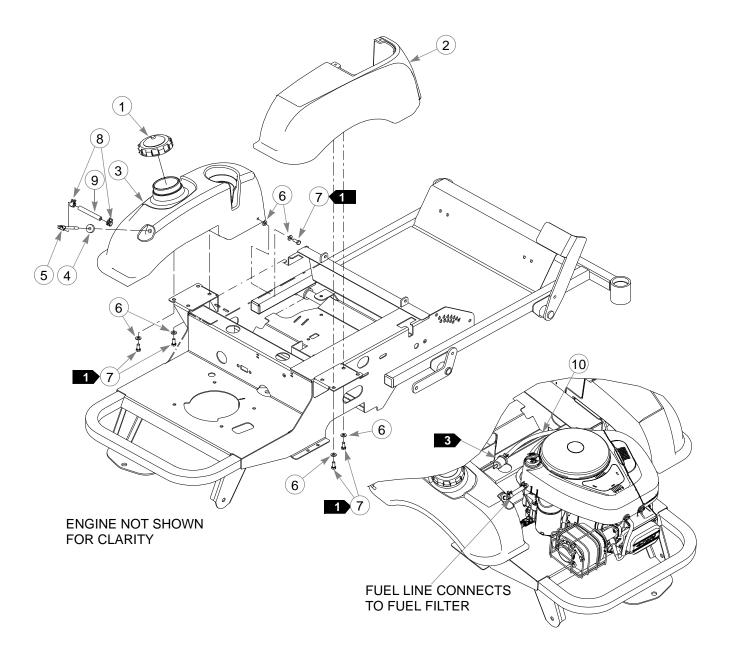
#### NOTES:

- 1. Part of Item 17 (601676 Tractor Wire Harness).
- 2. Engine oil capacity: Refer to engine owner's manual. Tighten dipstick before checking.
- 3. Engine RPM to be set at  $3450 \pm 50$ .
- 4. Air filter service parts:

| 601846 | FILTER, AIR PRECLEANER, BRIGGS 17.5 |
|--------|-------------------------------------|
| 601847 | FILTER, AIR FLAT PANEL, BRIGGS 17.5 |
| 601848 | FILTER. AIR PRECLEANER, BRIGGS 21   |
| 601849 | FILTER, AIR FLAT PANEL, BRIGGS 21   |

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## Fuel System Installation



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# Fuel System Installation

| ITEM<br>NO. | SERVICE<br>PART NO. | MFG.<br>PART NO. | QTY | DESCRIPTION                 |
|-------------|---------------------|------------------|-----|-----------------------------|
| 1           | 779306              | 779306           | 1   | 3.5" FUEL CAP               |
| 2           | 110080              | 110080           | 1   | FENDER RH                   |
| 3           | 110081              | 110081           | 1   | FENDER TANK LH              |
| 4           | 785295              | N/A              | 1   | GROMMET, FUEL SHUTOFF VALVE |
| 5           | 601805              | N/A              | 1   | SUCTION HOSE ASSY 22.0      |
| 6           | 768523              | 768523           | 8   | FW .343X.687X.051/.080H     |
| 7           | 034280              | 034280           | 6   | CS .312-18X .750 HX G5      |
| 8           | 000323              | 000323           | 2   | CLIP                        |
| 9           | 015818              | 015818           | 1   | FUEL LINE, 9"               |
| 10          | 015818              | 015818           | 1   | FUEL LINE, 12"              |

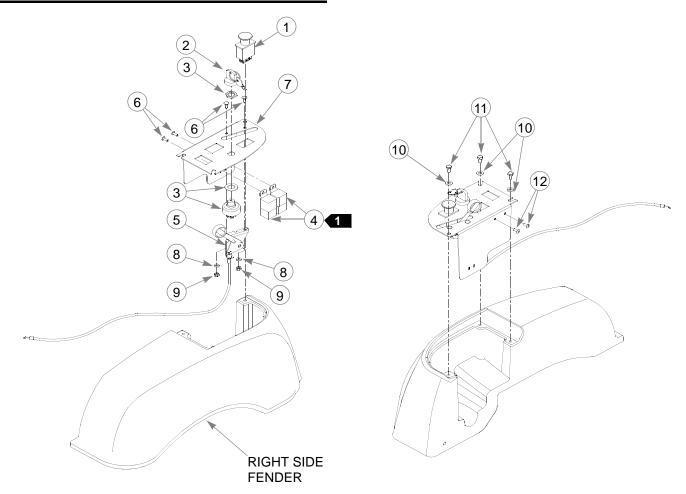
### NOTES:

- 1. Torque to 7 ft-lbs.
- 2. Service parts for fuel tanks (not shown):

| SERVICE PART NO. | DESCRIPTION            |
|------------------|------------------------|
| 785295           | FLANGE GROMMET         |
| 601805           | SUCTION HOSE ASSY 22.0 |

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# **Instrument Panel Installation**



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# Instrument Panel Installation

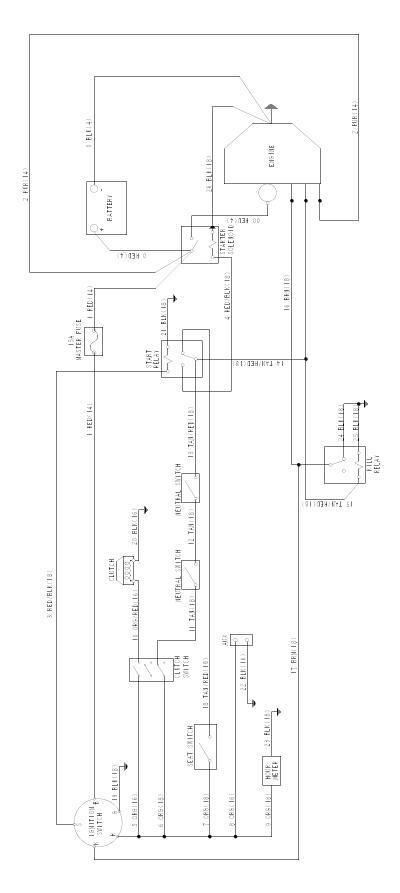
| ITEM<br>NO. | SERVICE<br>PART NO. | MFG.<br>PART NO. | QTY | DESCRIPTION               |
|-------------|---------------------|------------------|-----|---------------------------|
| 1           | 776476              | 776476           | 1   | SWITCH, PTO 6201-321(FS)  |
| 2           | 785808              | 785808           | 1   | KEY ASSEMBLY (FS)         |
| 3           | 045898              | 045898           | 1   | IGN SWITCH INDAK 3H463    |
| 4           | 026237              | N/A              | 2   | RELAY                     |
| 5           | 601803              | 601803           | 1   | THROTTLE/CHOKE CABLE ASSY |
| 6           | 601098              | 601098           | 2   | CB 10-24 X .500 ZYNC      |
| 7           | 110085              | 110085           | 1   | INSTRUMENT PANEL SPORT    |
| 8           | 704932              | 704932           | 2   | FW .219X .500X.048 ZNYC   |
| 9           | 059832              | 059832           | 2   | NT #10-24 HX NL ZN        |
| 10          | 768515              | 768515           | 3   | FW .281X.625X.051/.080H   |
| 11          | 055947              | 055947           | 3   | CS .250-20X .500 HX G5    |
| 12          | 601089              | 601089           | 2   | RIVET .188 DIA BLK HD     |

### **NOTES:**

1. Part of 601676 (Wire Harness).

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# Electrical Schematic - Briggs and Stratton (601676)



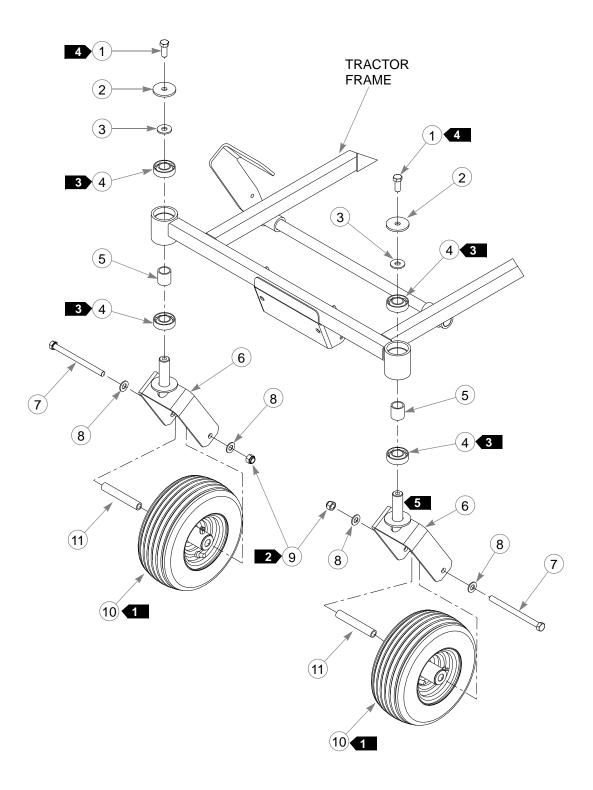
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## Front Wheel Assembly



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### Front Wheel Assembly

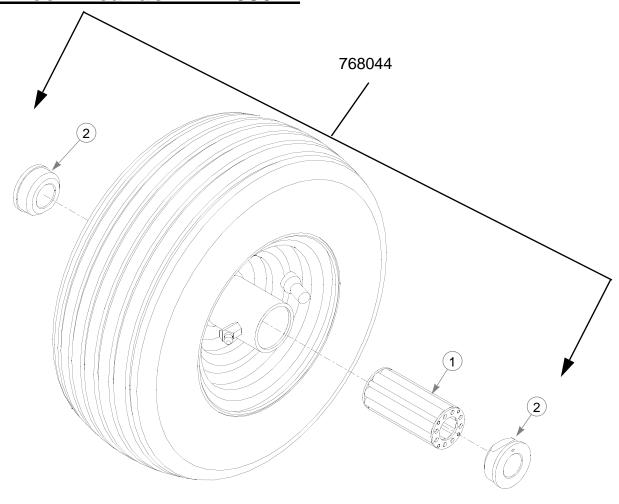
| ITEM NO. | SERVICE<br>PART NO. | MFG. PART<br>NO. | QTY | DESCRIPTION                  |
|----------|---------------------|------------------|-----|------------------------------|
| 1        | 705954              | 705954           | 2   | CS .500-13 X 1.25 HX G5 ZN   |
| 2        | 344267              | 344267           | 2   | FW .510 X 2.15 X .187 SPL ZN |
| 3        | 712976              | 712976           | 2   | FW .531X 1.375X.125 ZNY      |
| 4        | 784223              | 784223           | 4   | BEARING W/O COLLAR           |
| 5        | 784603              | 784603           | 2   | SPACER                       |
| 6        | 339689              | 339689           | 2   | CASTER FORK                  |
| 7        | 042630              | 042630           | 2   | CS .500-13X6.50 HX G5 Z      |
| 8        | 767962              | 767962           | 4   | FW .531X 1.063X.090 SAE      |
| 9        | 781567              | 781567           | 2   | NT .500-13 HX G8 ZY NL       |
| 10       | 768044              | 768044           | 2   | TIRE/WHL 11X4-5 RIBBED       |
| 11       | 306969              | 306969           | 2   | GAGE WHEEL SPACER            |

#### **NOTES:**

- 1. Apply grease to zerks (see owners manual).
- 2. Tighten, then back off until wheel spins freely.
- 3. Assemble with extended inner race down. Apply a thin continuous bead of Loctite® 609 to O.D. of outer races of bearings prior to assembling bearing into frame.
- 4. Apply Loctite® 242 to threads.
- 5. Appy Anti-Sieze to caster pivot shaft.

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# Front Wheel Breakdown - 768044



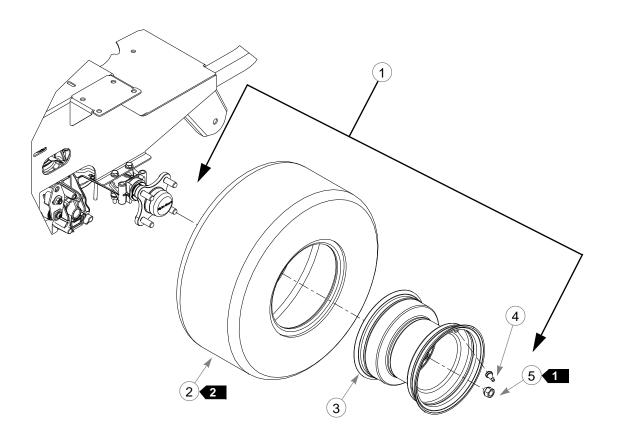
| ITEM<br>NO. | SERVICE<br>PART NO. | MFG.<br>PART NO. | QTY | DESCRIPTION         |
|-------------|---------------------|------------------|-----|---------------------|
| 1           | 772814              | N/A              | 1   | 3/4" ROLLER BEARING |
| 2           | 772806              | N/A              | 2   | BEARING CAP         |

### NOTES:

1. Inflate tire to 8-12 psi.

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# **Drive Wheel Assembly Installation**



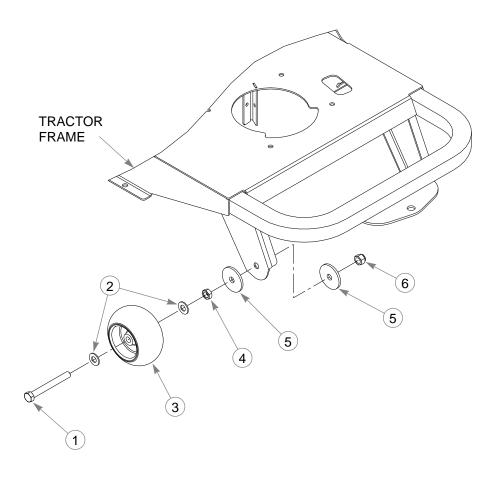
| ITEM<br>NO. | SERVICE<br>PART NO. | MFG.<br>PART NO. | QTY | DESCRIPTION             |
|-------------|---------------------|------------------|-----|-------------------------|
| 1           | 601810              | 601810           | 2   | TIRE/WHEEL 18X8.5-8     |
| 2           | 601821              | N/A              |     | TIRE 18 X 8.5 - SPORT   |
| 3           | 601820              | N/A              |     | WHEEL 8 X 6.93 - SPORT  |
| 4           | 019521              | N/A              |     | TIRE VALVE TR-412 GOODY |
| 5           | 061077              | 061077           | 8   | WHEEL NUT               |
|             |                     |                  |     |                         |

### NOTES:

- 1. Torque to 65-75 ft. lbs.
- 2. Inflate tire to 8-12 psi.

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# Anti-Rollover Wheel Assembly



| ITEM<br>NO. | SERVICE<br>PART NO. | MFG.<br>PART NO. | QTY | DESCRIPTION                      |
|-------------|---------------------|------------------|-----|----------------------------------|
| 1           | 781708              | N/A              | 2   | CS .500-13X4.250 HX G5           |
| 2           | 767962              | N/A              | 4   | FW .531 X 1.063 X .090 SAE HD ZN |
| 3           | 031997              | N/A              | 2   | ANTI-SCALP WHEEL                 |
| 4           | 053199              | N/A              | 2   | NT .500-13 HX JAM ZNYC           |
| 5           | 344267              | 344267           | 4   | FW .510X 2.15X.187 SPL           |
| 6           | 781567              | 781567           | 2   | NT .500-13 H8ZY NL               |
| 1           | 788166              | 788166           | 2   | ANTI-SCALP WHEEL ASSEMBLY        |

### NOTES:

1. Includes items 1 through 4.

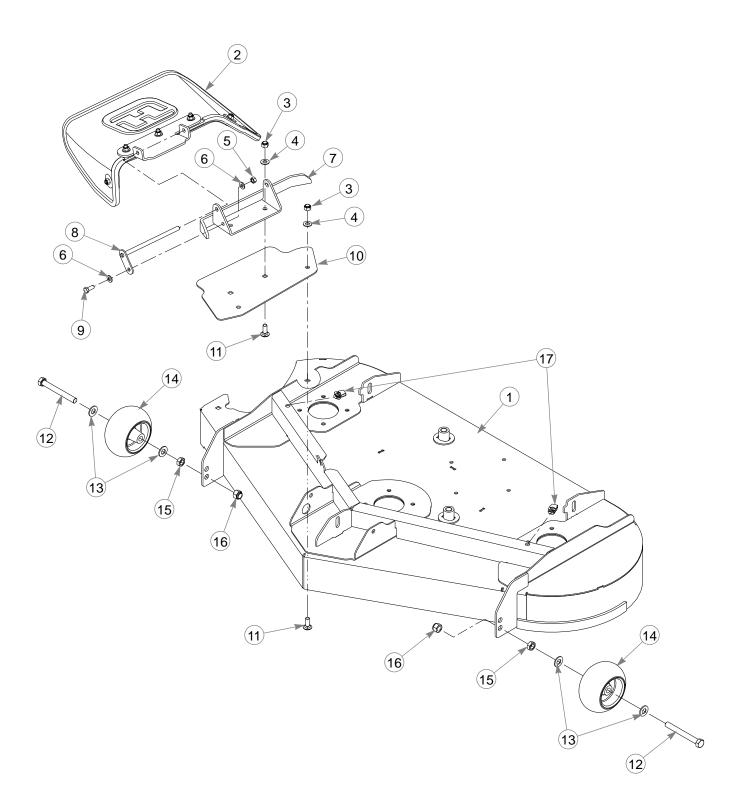
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## **Chapter 6 Contents**

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## 48" Side Discharge Deck Assembly



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## 48" Side Discharge Deck Assembly

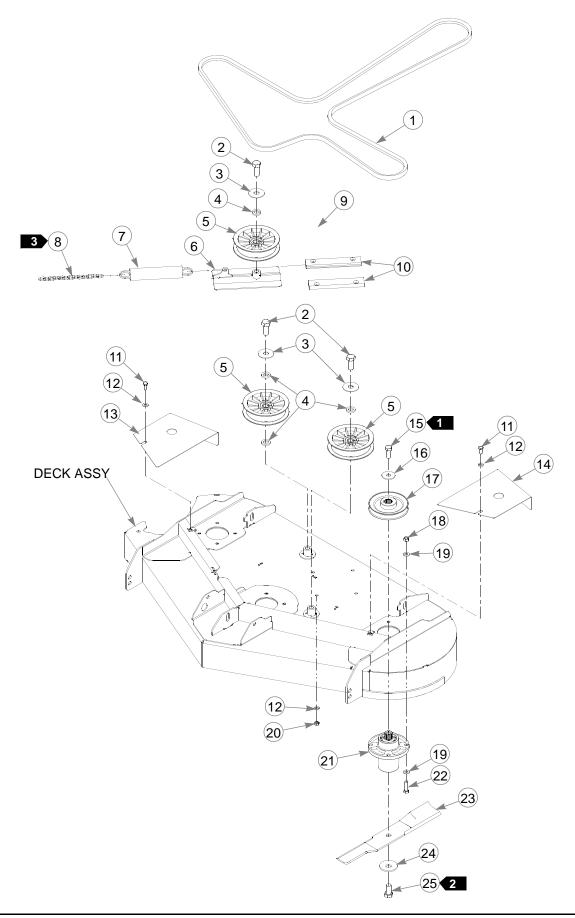
| ITEM<br>NO. | SERVICE<br>PART NO. | MFG.<br>PART NO. | QTY | DESCRIPTION                      |
|-------------|---------------------|------------------|-----|----------------------------------|
| 1           | 550017              | 109754           | 1   | 48" DECK WA                      |
| 2           | 601117              | 601117           | 1   | RUBBER CHUTE ASSEMBLY            |
| 3           | 086660              | 086660           | 4   | NT .375-16 HXZY NL               |
| 4           | 767954              | 767954           | 4   | FW .406 X .812 .060 SAE HD ZN    |
| 5           | 034272              | 034272           | 1   | NT .312-18 HX G5 ZNYC            |
| 6           | 768523              | 768523           | 2   | FW .343X.687X.051/.080H          |
| 7           | 108049              | 108049           | 1   | BRACKET CHUTE W/A                |
| 8           | 108537              | 108537           | 1   | PIN CHUTE MTG W/A                |
| 9           | 034280              | 034280           | 1   | CS .312-18X .750 HX G5           |
| 10          | 110913              | 110913           | 1   | CHUTE ADAPTER 48 SPORT           |
| 11          | 025395              | 025395           | 4   | CB .375-16 X 1.00 STD CD         |
| 12          | 781708              | N/A              | 4   | CS .500-13 X 4.25 HX G5 ZN       |
| 13          | 767962              | N/A              | 8   | FW .531 X 1.063 X .090 SAE HD ZN |
| 14          | 031997              | N/A              | 4   | ANTI-SCALP WHEEL                 |
| 15          | 053199              | N/A              | 4   | NT .500-13 HX JAM ZN             |
| 16          | 781567              | 781567           | 2   | NT .50-13 HX LK NY               |
| 17          | 601069              | 601069           | 2   | CN .312-18X.200 MAX THK          |
| 1           | 788166              | 788166           | 2   | ANTI SCALP WHEEL ASSY            |

#### NOTES:

- 1. Includes items 12, 13, 14, and 15.
- 2. Service part deck includes decals (see "48" Side Discharge Deck Decals" on page 8-4).

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## 48" Side Discharge Deck Pulley Assembly



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## 48" Side Discharge Deck Pulley Assembly

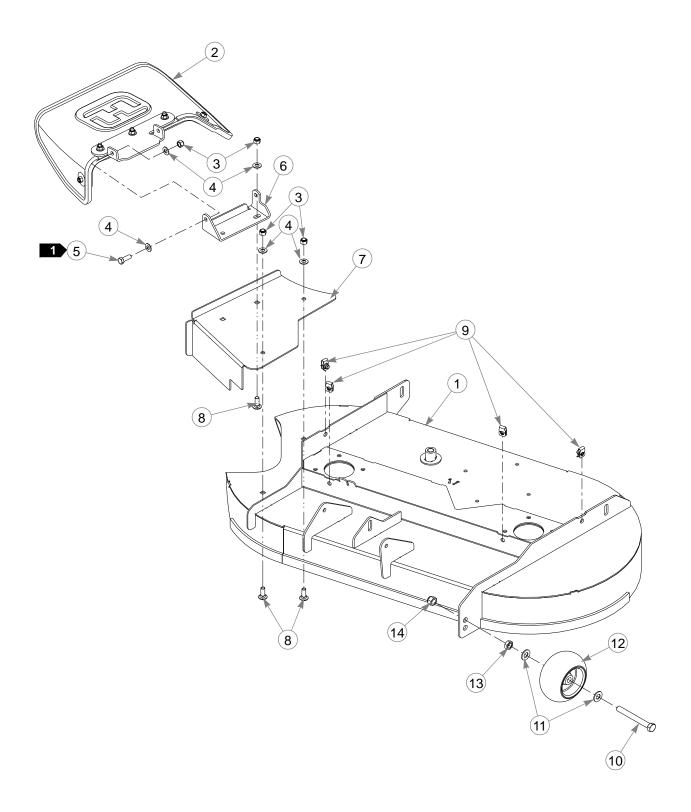
| ITEM<br>NO. | SERVICE<br>PART NO. | MFG.<br>PART NO. | QTY | DESCRIPTION                       |
|-------------|---------------------|------------------|-----|-----------------------------------|
| 1           | 771634              | 771634           | 1   | B-SECTION BELT                    |
| 2           | 794446              | 794446           | 3   | CS .625-11X1.500 HX G5            |
| 3           | 046821              | 046821           | 3   | FW .656X 2.00X.078 ZNYC           |
| 4           | 797449              | 797449           | 4   | FW .650X1.125X.18 ZNYCG5          |
| 5           | 784504              | 784504           | 3   | PULLEY, IDLER, 5.00"OD            |
| 6           | 109770              | 109770           | 1   | IDLER SLIDE W/A                   |
| 7           | 781302              | 781302           | 1   | IDLER SPRING                      |
| 8           | 259812              | 059931           | 1   | CHAIN DECK LIFT SPRING (13 LINKS) |
| 9           | 784199              | 784199           | 4   | CS .312-18X1.250 FLT SH           |
| 10          | 601619              | 601619           | 2   | IDLER SLIDE UHMW RT & LT          |
| 11          | 034280              | 034280           | 2   | CS .312-18X .750 HX G5            |
| 12          | 768523              | 768523           | 6   | FW .343X.687X.051/.080H           |
| 13          | 110840              | 110840           | 1   | PULLEY COVER, LH                  |
| 14          | 110841              | 110841           | 1   | PULLEY COVER, RH                  |
| 15          | 705954              | 705954           | 3   | CS .500-13X1.25 HX G5 Z           |
| 16          | 798603              | 798603           | 3   | FW .515X1.65X.125 HD ZY           |
| 17          | 792689              | 792689           | 3   | PULLEY 5.00"OD                    |
| 18          | 054502              | 054502           | 12  | NT .375-16 HX GRD 5 ZNY           |
| 19          | 767954              | 767954           | 24  | FW .406X .812 X.060 SAE           |
| 20          | 058776              | 058776           | 4   | NT .312-18 HXZY NL                |
| <b>4</b> 21 | 601804              | 601804           | 3   | SPINDLE ASSEMBLY                  |
| 22          | 005116              | 005116           | 12  | CS .375-16X1.375 HX G5            |
| 23          | 601123              | 601123           | 3   | BLADE, 16.50"-L-F-CW              |
| 24          | 782474              | 782474           | 3   | CW .631 2.250X .187 PNT           |
| 25          | 781872              | 781872           | 3   | CS .625-11X1.25 HX G5 Z           |

#### **NOTES:**

- 1. Torque to 73 ft. lbs.
- 2. Torque to 145 ft-lbs.
- 3. See "48" Deck Belt Routing and Tensioning" on page 7-6 for belt tensioning.
- 4. See "Spindle Assembly-601804" on page 6-10 for breakdown.

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## 42" Side Discharge Deck Assembly



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## 42" Side Discharge Deck Assembly

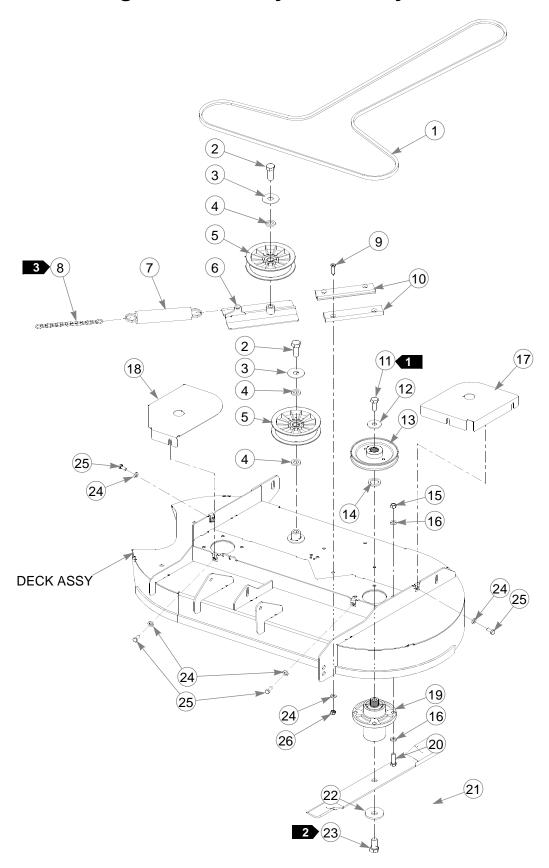
| ITEM<br>NO. | SERVICE<br>PART NO. | MFG.<br>PART NO. | QTY | DESCRIPTION                      |
|-------------|---------------------|------------------|-----|----------------------------------|
| <b>3</b> 1  | 550011              | 110150           | 1   | 42" DECK WA                      |
| 2           | 601117              | 601117           | 1   | RUBBER CHUTE ASSEMBLY            |
| 3           | 086660              | 086660           | 6   | NT .375-16 HXZY NL               |
| 4           | 767954              | 767954           | 8   | FW .406 X .812 .060 SAE HD ZN    |
| 5           | 036244              | 036244           | 2   | CS .375-16X1.000 HX G5           |
| 6           | 357103              | 357103           | 1   | DISCHARGE CHUTE BRACKET W/A      |
| 7           | 110912              | 110912           | 1   | DISCHARGE SPORT ADAPTER          |
| 8           | 025395              | 025395           | 4   | CB .375-16 X 1.00 STD CD         |
| 9           | 601069              | 601069           | 4   | CN .312-18X.200 MAX THK          |
| 10          | 781708              | N/A              | 1   | CS .500-13 X 4.25 HX G5 ZN       |
| 11          | 767962              | N/A              | 2   | FW .531 X 1.063 X .090 SAE HD ZN |
| 12          | 031997              | N/A              | 1   | ANTI-SCALP WHEEL                 |
| 13          | 053199              | N/A              | 1   | NT .500-13 HX JAM ZN             |
| 14          | 781567              | 781567           | 1   | NT .50-13 HX LK NY               |
| 2           | 788166              | 788166           | 1   | ANTI SCALP WHEEL ASSY            |

#### **NOTES:**

- 1. Do not torque, Item 2 (601117 Discharge Chute) must pivot freely.
- 2. Includes items 10, 11, 12, and 13.
- 3. Service part deck includes decals (see "42" Side Discharge Deck Decals" on page 8-5 for listing of decals).

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## 42" Side Discharge Deck Pulley Assembly



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## 42" Side Discharge Deck Pulley Assembly

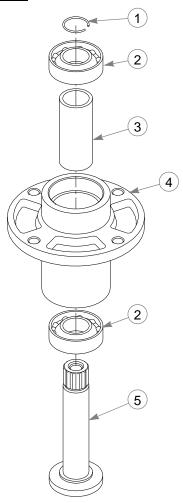
| ITEM<br>NO. | SERVICE<br>PART NO. | MFG.<br>PART NO. | QTY | DESCRIPTION                       |
|-------------|---------------------|------------------|-----|-----------------------------------|
| 1           | 600726              | 600726           | 1   | BELT, A 114.3" EL (42" DECK)      |
| 2           | 794446              | 794446           | 2   | CS .625-11X1.500 HX G5            |
| 3           | 046821              | 046821           | 2   | FW .656X 2.00X.078 ZNYC           |
| 4           | 797449              | 797449           | 4   | FW .650X1.125X.18 ZNYCG5          |
| 5           | 784504              | 784504           | 2   | PULLEY, IDLER, 5.00"OD            |
| 6           | 109770              | 109770           | 1   | IDLER SLIDE W/A                   |
| 7           | 781302              | 781302           | 1   | IDLER SPRING                      |
| 8           | 259812              | 059931           | 1   | CHAIN DECK LIFT SPRING (13 LINKS) |
| 9           | 784199              | 784199           | 4   | CS .312-18X1.250 FLT SH           |
| 10          | 601619              | 601619           | 2   | IDLER SLIDE UHMW RT & LT          |
| 11          | 705954              | 705954           | 2   | CS .500-13X1.25 HX G5 Z           |
| 12          | 798603              | 798603           | 2   | FW .515X1.65X.125 HD ZY           |
| 13          | 793778              | 793778           | 2   | DECK SPINDLE PULLEY               |
| 14          | 045765              | 045765           | 2   | FW 1.030X 1.500X.134 ZN           |
| 15          | 054502              | 054502           | 8   | NT .375-16 HX GRD 5 ZNY           |
| 16          | 767954              | 767954           | 16  | FW .406X .812 X.060 SAE           |
| 17          | 110892              | 110892           | 1   | PULLEY COVER, LH                  |
| 18          | 110891              | 110891           | 1   | PULLEY COVER, RH                  |
| 4 19        | 601804              | 601804           | 2   | SPINDLE ASSEMBLY                  |
| 20          | 005116              | 005116           | 8   | CS .375-16X1.375 HX G5            |
| 21          | 793794              | 793794           | 2   | BLADE,20.50"-L-F-CW               |
| 22          | 782474              | 782474           | 2   | CW .631 2.250X .187 PNT           |
| 23          | 781872              | 781872           | 2   | CS .625-11X1.25 HX G5 Z           |
| 24          | 768523              | 768523           | 8   | FW .343X.687X.051/.080H           |
| 25          | 034280              | 034280           | 4   | CS .312-18X .750 HX G5            |
| 26          | 058776              | 058776           | 4   | NT .312-18 HXZY NL                |

#### **NOTES:**

- 1. Torque to 73 ft. lbs.
- 2. Torque to 145 ft-lbs.
- 3. See "42" Deck Belt Routing and Tensioning" on page 7-7 for belt tensioning.
- 4. See "Spindle Assembly-601804" on page 6-10 for breakdown.

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## Spindle Assembly-601804



| ITEM<br>NO. | SERVICE<br>PART NO. | MFG.<br>PART NO. | QTY. | DESCRIPTION                  |
|-------------|---------------------|------------------|------|------------------------------|
| 1           | 783548              | N/A              | 1    | BLADE SPINDLE RETAINING RING |
| 2           | 601827              | N/A              | 2    | BLADE SPINDLE BEARING        |
| 3           | 601830              | N/A              | 1    | BLADE SPINDLE SPACER         |
| 4           | 601828              | N/A              | 1    | BLADE SPINDLE HOUSING        |
| 5           | 601829              | N/A              | 1    | BLADE SPINDLE SHAFT          |
|             |                     |                  |      |                              |

NOTES:

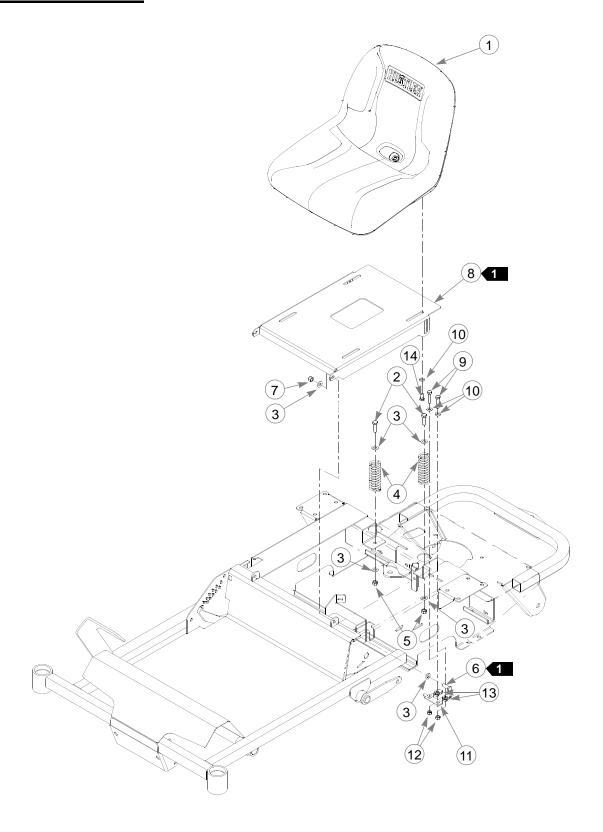
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## Seat Installation



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## Seat Installation

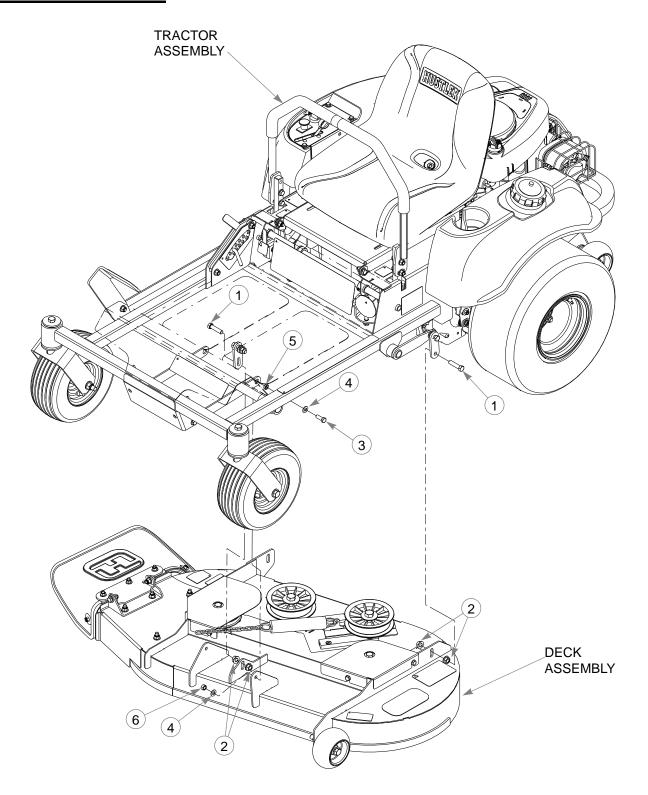
| ITEM<br>NO. | SERVICES<br>PART NO. | MFG.<br>PART NO. | QTY | DESCRIPTION             |
|-------------|----------------------|------------------|-----|-------------------------|
| 1           | 601807               | 601807           | 1   | SEAT-SPORT              |
| 2           | 052860               | 052860           | 2   | CS .375-16X1.250 HX G5  |
| 3           | 767954               | 767954           | 12  | FW .406X .812 X.060 SAE |
| 4           | 793851               | 793851           | 2   | SPRING,COMP 1.25X4.00X. |
| 5           | 054502               | 054502           | 2   | NT .375-16 HX GRD 5 ZNY |
| 6           | 036244               | 036244           | 2   | CS .375-16X1.000 HX G5  |
| 7           | 086660               | 086660           | 2   | NT .375-16 HXZY NL      |
| 8           | 110835               | 110835           | 1   | SEATPAN, SPORT          |
| 9           | 756270               | 756270           | 2   | CS .312-18X1.50 FLTHR G |
| 10          | 768523               | 768523           | 6   | FW .343X.687X.051/.080H |
| 11          | 110876               | 110876           | 1   | CATCH, SPORT SEAT PAN   |
| 12          | 070557               | 070557           | 2   | NT .312-18 HX UNT ZN    |
| 13          | 601069               | 601069           | 2   | CN .312-18X.200 MAX THK |
| 14          | 034280               | 034280           | 4   | CS .312-18X .750 HX G5  |

#### NOTES:

1. Do not torque, Item 8 (Seat Pan) must pivot freely.

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## **Deck Installation**



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## **Deck Installation**

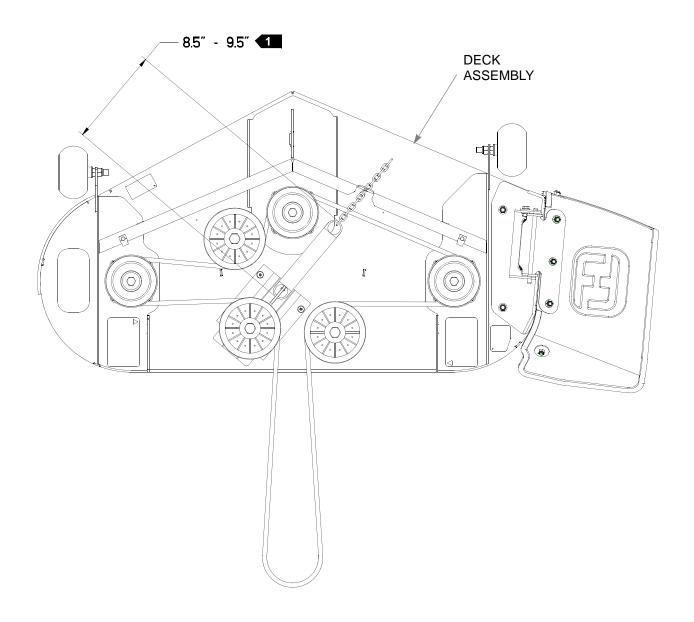
| ITEM<br>NO. | SERVICE<br>PART NO. | MFG.<br>PART NO. | QTY | DESCRIPTION             |
|-------------|---------------------|------------------|-----|-------------------------|
| 1           | 055749              | N/A              | 6   | CS .437-14X1.750 HX G5  |
| 2           | 704643              | N/A              | 6   | NT .437-14 HX FLG ZN    |
| 3           | 036244              | 036244           | 2   | CS .375-16X1.000 HX G5  |
| 4           | 767954              | 767954           | 4   | FW .406X .812 X.060 SAE |
| 5           | 601839              | N/A              | 2   | PIVOT SPACER BUSHING    |
| 6           | 054502              | 054502           | 2   | NT .375-16 HX GRD 5 ZNY |

#### NOTES:

1. 42" deck installation is shown, 48" deck is similar.

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## 48" Deck Belt Routing and Tensioning

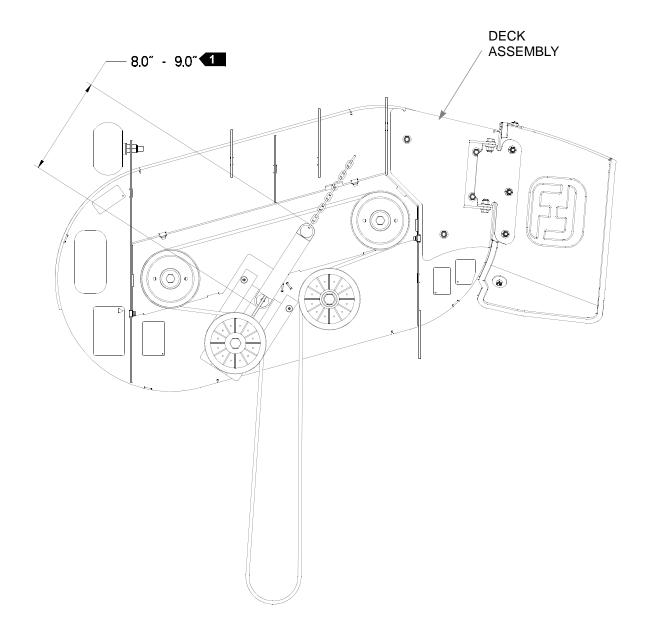


#### NOTES:

- 1. Spring length after tensioning new belt. Measured from outside of hook to outside of hook.
- 2. Route belt as shown.

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## 42" Deck Belt Routing and Tensioning



#### **NOTES:**

- 1. Spring length after tensioning new belt. Measured from outside of hook to outside of hook.
- 2. Route belt as shown.

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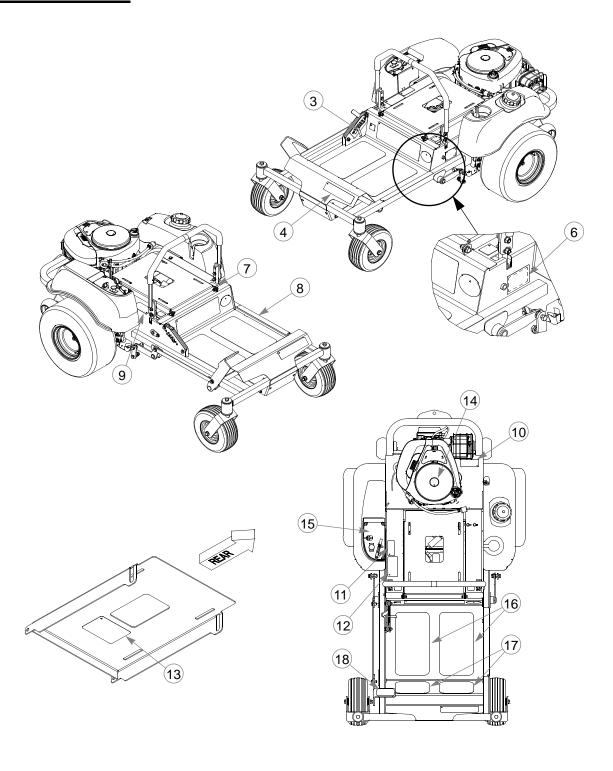
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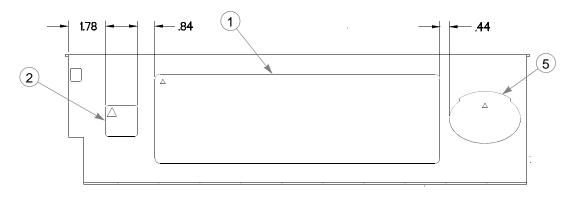
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## **Tractor Decals**



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## **Tractor Decals**

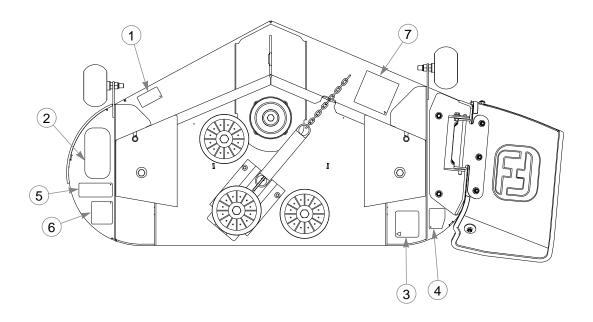


| ITEM<br>NO. | SERVICE<br>PART NO. | MFG.<br>PART NO. | QTY. | DESCRIPTION              |
|-------------|---------------------|------------------|------|--------------------------|
| 1           | 601812              | 601812           | 1    | SPORT ID DECAL           |
| 2           | 727172              | 727172           | 1    | DECAL 'MADE IN U.S.A.'   |
| 3           | 601814              | 601814           | 1    | SPORT DECK HEIGHT DECAL  |
| 4           | 601813              | 601813           | 1    | HUSTLER FRONT DECAL      |
| 5           | 782573              | 782573           | 1    | DECAL, FIRST ZERO TURN   |
| 6           | N/A                 | 083279           | 1    | SERIAL NO PLATE TURF PR  |
| 7           | 785139CE            | 785139CE         | 1    | DECAL, STEERING L.S.     |
| 8           | 601981              | 601981           | 1    | HUSTLER DECAL FRONT      |
| 9           | 785220CE            | 785220CE         | 1    | DECAL, STEERING R.S.     |
| 10          | 601967              | 601967           | 1    | DECAL, ENGINE DEPARTMENT |
| 11          | 600941              | 600941           | 1    | DECAL, PATENTS           |
| 12          | 600899              | 600899           | 1    | DECAL, PUMP BELT WARNING |
| 13          | 601815              | 601815           | 1    | DECAL, BATTERY           |
| 14          | 601867              | 601867           | 1    | DECAL, HUSTLER "H"       |
| 15          | 601811              | 601811           | 1    | DASH DECAL INSTRUMENT    |
| 16          | 601986              | 601986           | 2    | STEP TREAD, LOWER SPORT  |
| 17          | 110063              | 110063           | 2    | GRIP TAPE                |
| 18          | 601987              | 601987           | 1    | STEP TREAD, FOOT LIFT    |

NOTES:

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# 48" Side Discharge Deck Decals

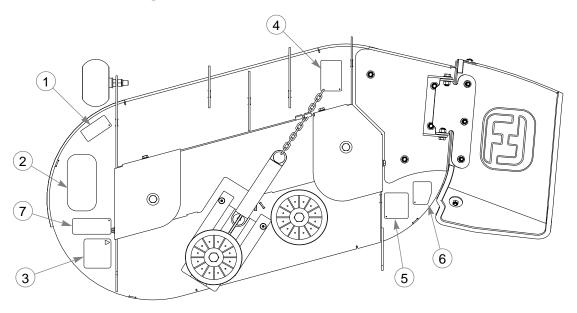


| NO. | SERVICE<br>PART NO. | MFG.<br>PART NO. | QTY. | DESCRIPTION                  |
|-----|---------------------|------------------|------|------------------------------|
| 1   | 793976              | 793976           | 1    | 48 DECK ID DECAL             |
| 2   | 794503              | 794503           | 1    | STEP TREAD DECAL             |
| 3   | 601837              | 601837           | 1    | DECK DANGERS DECAL           |
| 4   | 601817              | 601817           | 1    | DISCHARGE DECAL              |
| 5   | 601892              | 601892           | 1    | DECAL, THROWN OBJECTS, LARGE |
| 6   | 601816              | 601816           | 1    | DECAL, DECK DANGERS, SMALL   |
| 7   | 781419CE            | 781419CE         | 1    | DECAL,Z DECK BELT RTG C      |
|     |                     |                  |      |                              |

NOTES:

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## 42" Side Discharge Deck Decals



| ITEM<br>NO. | SERVICE<br>PART NO. | MFG.<br>PART NO. | QTY. | DESCRIPTION                  |
|-------------|---------------------|------------------|------|------------------------------|
| 1           | 793521              | 793521           | 1    | 42 DECK ID DECAL             |
| 2           | 794503              | 794503           | 1    | STEP TREAD DECAL             |
| 3           | 601837              | 601837           | 1    | DECK DANGERS DECAL           |
| 4           | 793687              | 793687           | 1    | BELT ROUTING DECAL           |
| 5           | 601816              | 601816           | 1    | DECK DANGERS DECAL           |
| 6           | 601817              | 601817           | 1    | DISCHARGE DECAL              |
| 7           | 601892              | 601892           | 1    | DECAL, THROWN OBJECTS, LARGE |
|             |                     |                  |      |                              |

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### Assembly Pictures and Aids

#### **General Information for all models**

Instrument panel (FIG. 1 & FIG. 2).



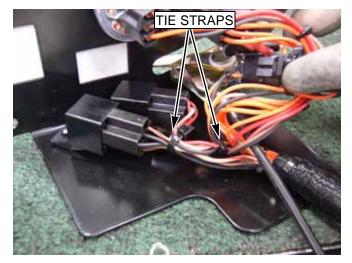


FIG. 1 FIG. 2

#### Wire harness and cable routings

Front of wire harness (FIG. 3). Route the 12" positive battery cable and the red wire through the cable boot prior to fastening hardware to solenoid (FIG. 4).



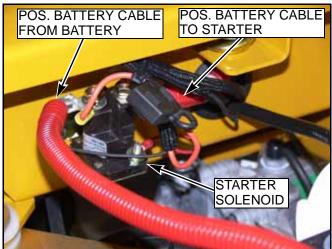
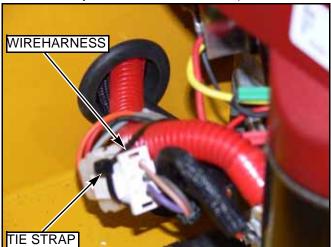


FIG. 3 FIG. 4

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Route battery cables and wireharness (from seat and safety switches) through hole in the left side of frame (FIG. 5).



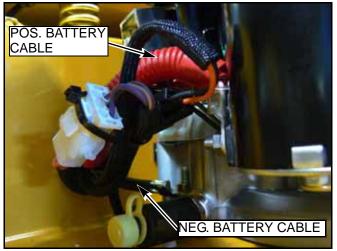
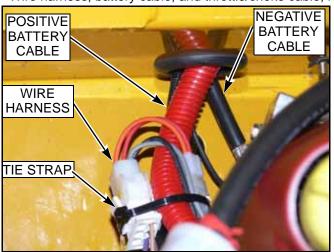


FIG. 5 FIG. 6 Wire harness, battery cable, and throttle/choke cable, routing and tie straps (FIG. 7 & FIG. 8) .



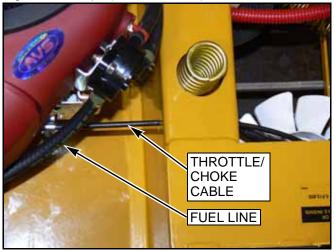


FIG. 8

FIG. 7 Clutch pigtail to clutch anchor tie strap (FIG. 9). Safety switches and tie straps (FIG. 10)

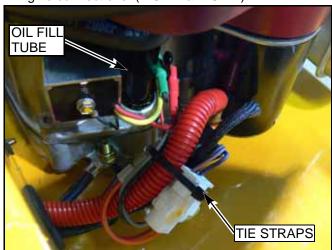




FIG. 9 FIG. 10

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Engine connections (FIG. 11 & FIG. 12).



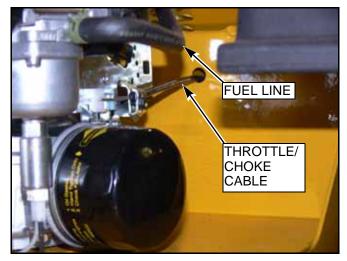
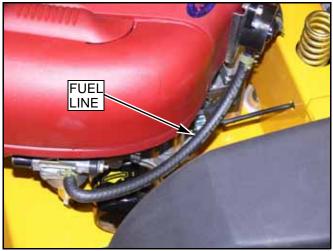


FIG. 11 FIG. 12

### **Fuel Lines**

1.

Fuel line routing (FIG. 13, & FIG. 14). Be sure fuel filter does not come in contact with engine.



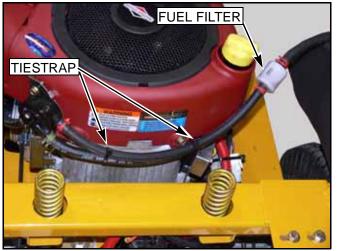


FIG. 13 FIG. 14

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### Maintenance & Adjustment Safety



This safety alert symbol is used to call attention to a message intended to provide a reasonable degree of PERSONAL SAFETY for operators and other persons during the normal operation and servicing of this equipment.

DANGER—denotes immediate hazards which WILL result in severe personal injury or death.

WARNING—denotes a hazard or unsafe practice which COULD result in severe personal injury or death.

This manual uses two other words to highlight information. **IMPORTANT** calls attention to special mechanical information and **NOTE:** emphasizes general information worthy of special attention.

All operators should read this manual, or be instructed about safe operating and maintenance procedures. This is the owner's responsibility.

Improper use or maintenance by the operator, mechanic, or owner can result in injury. To reduce the potential for injury, comply with these safety instructions and always pay attention to the safety alert ?symbol, which means DANGER or WARNING—"personal safety instructions." Failure to comply with the instructions may result in personal injury or death.

Incorrect usage of this machine may result in severe injury. Personnel operating and maintaining it should be trained in the proper use and should read the manuals completely and thoroughly before attempting to set-up, operate, adjust, or service this machine.

The Quick Reference Decals, located in front of and to the right of the seat, are designed to give the operator/ mechanic brief information needed in the daily operation and service of the machine. These decals are not intended to be used in place of this manual but instead is to be used as an extension of this manual. These decals should not be removed or obliterated. Replace these decals if they become unreadable.

It is the **owner's responsibility** to make certain that the operator/mechanic reads and understands this manual and all decals before operating this machine. It is also the **owner's responsibility** to make certain that the operator/mechanic is a qualified and physically able individual, properly trained in the operation of this equipment. Local regulations may restrict the age of the operator/mechanic.

The owner should also ensure that the operator/mechanic knows that they are responsible for their own safety as well as the safety of other persons within the vicinity. **Remember**, the operator/mechanic is responsible for accidents or hazards occurring to other people or their property.

#### **Safe Maintenance & Adjustment Practices**

This product is capable of amputating hands and feet and throwing objects. Always follow all safety instructions to avoid serious injury or death.

- ? Unless specifically required, DO NOT have engine running when servicing or making adjustments to tractor. Place control levers in the park brake position, disengage deck clutch, remove ignition switch key and disconnect the negative battery cable. Repairs or maintenance requiring engine power should be performed by trained personnel only. To prevent carbon monoxide poisoning, be sure proper ventilation is available when engine must be operated in an enclosed area.
- ? Follow daily and weekly checklists, making sure hoses are tightly secured and bolts are tightened.
- ? Keep your machine clean and remove any deposits of trash and clippings, which can cause engine fires and hydraulic overheating as well as excessive belt wear. Clean up oil or fuel spillage. Allow machine to cool before storing.
- ? Clean flammable material from machine. Prevent fires by keeping engine compartment, battery, hydraulic lines, fuel line, fuel tank and operator's station clean of accumulated trash, grass clippings, and other debris. Always clean up spilled fuel and oil.
- ? Always wear adequate ear protection, such as earplugs, when operating this equipment as prolonged exposure to uncomfortable or loud noises can cause impairment or loss of hearing. Do not wear radios or music headphones while operating the machinery. Safe operation requires your full attention.
- ? Never put hands or feet under any part of the machine while it is running.

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- ? Except when changing or checking belt, always keep belt covers on mower for safety as well as cleanliness.
- ? Stop the engine before removing the grass catcher or unclogging the discharge chute. Never clear the discharge chute with the engine running. Turn off the engine and be sure the blades have stopped before cleaning. Use a stick to clear a plugged discharge area. Never use your hand!
- ? Exercise caution when loading or unloading the machine onto a trailer or truck.
- ? Always wear safety goggles or safety glasses with side shields when operating the mower.
- ? Never leave machine unattended with ignition key in switch, especially with children present.
- ? Be alert and turn the machine off if children enter the area.
- ? Always wear adequate eye protection when servicing the battery, hydraulic system, cooling system or when grinding mower blades and removing accumulated debris.
- ? Use extra caution when handling gasoline and other fuels. They are flammable and vapors are explosive.
- ? Never refuel tractor while engine is running; never refuel near an open flame or near devices which can create a spark. Refuel outdoors preferably, or in well ventilated areas.
- ? Never attempt to start engine when there is a strong odor of gasoline fumes present. Locate and correct cause.
- ? Never run the engine in an enclosed area unless exhaust is vented to the outside. Exhaust gases contain carbon monoxide which is odorless and deadly poison.
- ? Never attempt to make any adjustments or repairs to the tractor drive system, mower deck or any attachment while the tractor engine is running or deck clutch is engaged. Repairs or maintenance requiring engine power should be performed by trained personnel only.
- ? Never work under the machine or attachment unless it is safely supported with jack stands. Make certain machine is secure when it is raised and placed on the jack stands. The jack stands should not allow the machine to move when the engine is running and the drive wheels are rotating. Use only certified jack stands. Use only appropriate jack stands, with a minimum weight rating of 2000 pounds to block the unit up. Use in pairs only. Follow the instructions supplied with the vehicle stands.
- ? Before working on or under the deck, make certain engine cannot be accidentally started. Shut engine off and remove ignition switch key for maximum safety. Repairs or maintenance requiring engine power should be performed by trained personnel only.
- ? Use a stick or similar instrument to clean under the mower making sure that no part of the body, especially arms and hands are under mower.
- ? Exercise caution when working under the deck as the mower blades are extremely sharp. Wearing gloves or wrapping the blade(s) is advisable when working around or with the blades.
- ? Do not touch hot parts of machine.
- ? Keep nuts and bolts tight, especially the blade attachment bolts. Keep equipment in good condition.
- ? Never tamper with safety devices. Check their proper operation regularly.
- ? Grass collection system components are subject to wear, damage and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components and replace with manufacturer's recommended parts, when necessary.
- ? Use only genuine Hustler replacement parts to ensure that original standards are maintained

#### Using a ramp

- ? Use extreme caution when loading and unloading a unit with a ramp.
- ? Use only a single, full width ramp; do not use individual ramps for each side of the unit. Having a full width ramp provides a surface for the tractor frame to contact if the unit starts to tip backwards. It also reduces the risk of a wheel going off and the machine tipping over.
- ? Do not exceed a 15 degree angle between the ramp and the ground or between the ramp and the trailer or truck.
- ? When on a ramp avoid sudden acceleration

#### **Safety and Instruction Decals**

? Specific safety warning decals are located on the equipment near the immediate areas of potential hazards. These decals should not be removed or obliterated. Replace them if they become non-readable.

The following illustrations show the various **decals** that are located on the machine. A brief explanation, for those requiring one, is shown to help the operator understand the meanings of these decals.



Read Owner's Manual and Quick Reference Decal before attempting to operate this machine.



Part Number 727016

Avoid skin contact with battery acid.

Always wear eye protection when checking the battery, acid can cause serious injury to skin and eyes. If contact occurs, flush area with clean water and call physician immediately. Acid will also damage clothing.

Do not allow open flame near the battery when charging.

Hydrogen gas forms inside the battery. This gas is both toxic and flammable and may cause an explosion if exposed to flame. Always remove the negative ground first and replace it last. Do not overfill battery.

Electrolyte may overflow and damage paint, wiring or structure. When cleaning the battery, use soap and water. Be careful not to get soap and water into the battery. Use soda mixed in water to clean corrosion off the terminals.



Part Number 771436

Do not remove or modify stabilizer wheels or rear engine guard or injury can result.



Part Number 788968

Keep engine and pump compartment(s) clean (especially in exhaust area) to prevent fire and provide maximum engine and hydraulic cooling.



Do not smoke while refueling.

Do not fill tank with engine running, or while the engine is hot.

Allow engine to cool before storing machine inside a building.

Store away from open flame or spark if there is fuel in tank.

Clean up any gasoline spills.

Do not refuel while in enclosed trailer or other enclosed areas.



Part Number 727420

Never operate the mower deck with side deflector removed or in raised position, except when the grass catcher attachment is being used.



Part Number 727438

Whirling blades! Keep hands and feet away. Beware of thrown objects.



Part Number 727453

Keep shields or covers in place while machine is in operation. Keep hands away from rotating pulleys and belts.



Part Number 600899

If you lose steering control while operating the machine, place the steering control levers in the park brake position immediately. Inspect the machine and involve your Hustler dealer to resolve the problem before continuing to operate.

If pump belt fails, steering control will be lost. Refer to owner's manual for inspection and replacement intervals and refer to above paragraph for emergency procedures.

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### Maintenance

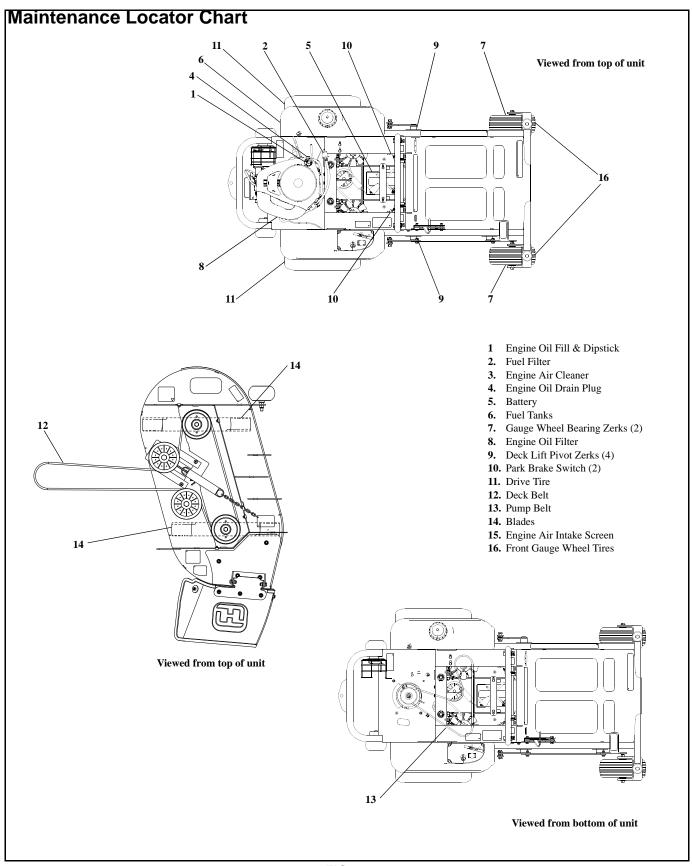


FIG. 15

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| SERVICE AT INTERVALS INDICATED        | WEEKLY<br>OR 50<br>HOURS           | MONTHLY<br>OR 100<br>HOURS         | ANNUALLY<br>OR 300<br>HOURS |  |
|---------------------------------------|------------------------------------|------------------------------------|-----------------------------|--|
| Verify safety start interlock system  | Prior to eac                       | ch use                             | <u> </u>                    |  |
| Visually inspect unit for loose       |                                    |                                    |                             |  |
| hardware and/or damaged parts         | Prior to each use                  |                                    |                             |  |
| Visually inspect tires                | Prior to each use                  |                                    |                             |  |
| Check oil level, engine (1)           | Prior to eac                       | ch use or eve                      | ry 4 hours                  |  |
| Clean air intake screen (4)           | Prior to each use or every 4 hours |                                    |                             |  |
| Clean foam element (4)                | Prior to eac                       | Prior to each use or every 4 hours |                             |  |
| Check fuel level                      | Prior to eac                       | ch use                             |                             |  |
| Blades - sharpen & securely fastened  | Prior to eac                       | ch use                             |                             |  |
| Discharge chute - securely in place & |                                    |                                    |                             |  |
| in lowest position                    | Prior to each use                  |                                    |                             |  |
| Check hydraulic oil level             | Daily                              | Daily                              |                             |  |
| Clean engine and transaxle            |                                    |                                    |                             |  |
| compartment                           | Daily                              |                                    |                             |  |
| Change transaxle oil and filter (7)   | Every 200                          | hours or 2 ye                      | ars                         |  |
| Grease deck height pivots             | X                                  |                                    |                             |  |
| Grease gauge wheel bearings           | X                                  |                                    |                             |  |
| Change engine oil and filter (1) (3)  | X                                  |                                    |                             |  |
| Clean cylinder and head fins(a)       | X                                  |                                    |                             |  |
| Check battery connections             | X                                  |                                    |                             |  |
| Check tire pressure with a gauge      | X                                  |                                    |                             |  |
| Check hydraulic oil level             | X                                  |                                    |                             |  |
| Clean engine exterior (a)             | X                                  |                                    |                             |  |
| Clean & re gap spark plugs (a)        |                                    | X                                  |                             |  |
| Check pump and deck belt tension      |                                    |                                    |                             |  |
| and condition (5)                     |                                    | X                                  |                             |  |
| Check fuel and hydraulic lines (6)    |                                    | X                                  |                             |  |
| Check fuel valve and grommet (6)      |                                    | X                                  |                             |  |
| Tighten lug nuts on wheels (2)        |                                    | X                                  |                             |  |
| Change fuel filter                    |                                    |                                    | X                           |  |
| Replace spark plugs                   |                                    |                                    | X                           |  |
| Š·                                    | 1                                  | •                                  |                             |  |

#### NOTES:

- 1. Initial oil change is after 5 hours of operation. Thereafter, change oil after every 40 hours operation. Change more often under dusty or dirty conditions and during hot weather periods.
- 2. Torque initially and after first 2 hours of operation.
- 3. Change engine oil filter per the engine manufacturer's recommendations. Refer to Engine Owner's Manual for recommendations and other maintenance items.
- 4. Service more often under dusty or dirty conditions.
- 5. **Pump drive belt only Inspect every 6 months or 100 hours** and replace if worn or cracking is noticed. Otherwise, **replace every 200 hours or 2 years** whichever comes first.
- 6. Check fuel line hoses, fuel valve and grommets for any cracks or leaks
- 7. Initial system oil and filter change **must** be after the first 75 hours of use or 1 year whichever comes first. Thereafter, replace filter and oil in each transaxle every 2 years or 200 hours, whichever comes first.

#### **REFERENCES:**

a -- Refer to Engine Owner's Manual

NOTE: After completing maintenance cycle (300 hours), repeat cycle.

#### **Introduction**

Regular maintenance is the best prevention for costly downtime or expensive, premature repair. The following pages contain suggested maintenance information and schedules which the operator should follow on a routine basis. Remain alert for unusual noises, they could be signaling a problem. Visually inspect the machine for any abnormal

wear or damage. A good time to detect potential problems is while performing scheduled maintenance service. Correcting the problem as quickly as possible is the best insurance.

Clear away heavy build-up of grease, oil and dirt, especially in the engine and under the seat platform areas; minute dust particle are abrasive to close-tolerance engine and hydraulic assemblies.

**Daily inspect** mower for grass clippings and wire and string tangles. The underside of the mower deck will collect a build-up of grass clippings and dirt, especially when grass is wet or has high moisture content. This build-up will harden, restricting blade and air movement and will probably show a poorer quality of cutting. Therefore it should be removed routinely.

To do this it will be necessary to raise and block the deck, using jack stands or blocks, in the full up position and scrape the build-up from underneath.

Some repairs require the assistance of a trained service mechanic and should not be attempted by unskilled personnel. Consult your Hustler service center when assistance is needed.

#### **Torque values**

Torque values are given below:

| Wheel (lug) nuts          | 65-75 FTLBS. |
|---------------------------|--------------|
| Blade spindle bolt top    | 118 FTLBS.   |
| Blade spindle bolt bottom | 118FTLBS.    |

**Lug nuts only -** It is recommended that these be checked after the first 2 hours of operation, initially, every 50 hours and following removal for repair or replacement.

For all other torques refer to the various tractor parts manuals for standard torque chart. See page 21 for ordering information.

For engine torque values, see engine owner's manual.

#### **Tires**

It is important for level mowing that the tires have the same amount of air pressure. The recommended pressure are:

| Drive Wheels | 8-12 PSI |
|--------------|----------|
| Front Wheels | 8-12 PSI |

**Solid fill tires are not recommended** for Hustler turf equipment. On any machine, with solid filled tires, the warranty claim will be denied.



**WARNING:** Explosive separation of a tire and rim can cause serious injury or death. Do not attempt to mount a tire without the proper equipment and experience to perform the task. Always maintain the correct tire pressure and never over inflate. Never weld or heat a wheel and tire assembly as an explosion may occur. Welding can weaken or deform a wheel. When inflating tires stand to one side and not in front of or over the tire assembly. Check tires for low pressure, blemishes, damaged rims or missing lug bolts and nuts.

#### **Lubrication**

- 1. Grease the front gauge wheel bearings per the Maintenance Schedule. Use SAE multi-purpose grease.
- 2. Grease the four deck lift pivots, located to the side of the operator's footrest per the Maintenance Schedule. Use SAE multi-purpose grease.

#### **Electrical system**

The electrical system is a 12-volt, negative ground. Recommended battery size is a garden tractor BCI group U1R with 225 or better cranking AMP rating. A maintenance-free battery is recommended. Otherwise, follow battery manufacturer's maintenance, safety, storing and charging specifications.

The battery is located under the seat platform. FIG. 16

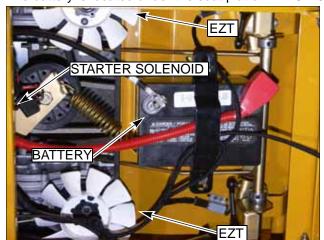




FIG. 16 FIG. 17



**WARNING:** Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.



**WARNING:** Avoid skin and clothing contact with battery acid. Always wear eye protection when checking the battery, acid can cause serious injury to skin and eyes. If contact occurs, flush area with clean water and call physician immediately. Acid will also damage clothing. Do not drink the battery electrolyte. Do not allow open flame near the battery when charging. Hydrogen gas forms inside the battery. This gas is both toxic and flammable and may cause an explosion if exposed to flame. Always remove the negative ground first and replace it last. Do not overfill battery. Electrolyte may overflow and damage paint, wiring or structure. When cleaning the battery, use soap and water. Be careful not to get soap and water into the battery. Clean the battery terminals with a solution of four parts water and one part baking soda when they become corroded.



**WARNING:** Shorts caused by battery terminals or metal tools touching metal tractor components can cause sparks. Sparks can cause a battery gas explosion which will result in personal injury. Prevent the battery terminals from touching any metal tractor parts when removing or installing the battery. Do not allow metal tools to short between the battery terminals and metal tractor parts.



**WARNING:** Incorrect battery cable routing could cause damage to the tractor and battery cables. This can cause sparks which can cause a battery gas explosion which will result in personal injury. Always **disconnect** the negative (black) battery cable before disconnecting the positive (red) cable. Always **connect** the positive (red) battery cable before connecting the negative (black) cable.

Common circuit failures are usually caused by shorting, corroded or dirty terminals; loose connections, defective wire insulation or broken wires. Switches, solenoids and ignition components may also fail, causing a shorted or open circuit.

The electrical system is protected by a fuse located on the wiring harness near the starter solenoid. FIG. 17. The fuses are as follows:

| Function | Size   | Туре       |  |
|----------|--------|------------|--|
| Main     | 15 amp | blade-type |  |

Before attempting any failure diagnosis of the electrical system, use a test light or voltmeter to check the battery voltage. If the battery voltage is satisfactory, check the cleanliness and tightness of the terminals and ground connections. A general understanding of electrical servicing and use of basic test equipment is necessary for troubleshooting and repair.

Major overhaul or repair of the starting motor or charging system should be performed by trained technicians only.

## **Access to Hydro-Gear EZT transmissions**

The integrated pump/motor units are accessed by lifting the seat platform. The seat platform is hinged at the front. To raise it, remove the lock nut and tilt seat platform up and forward.

If the seat is equipped with the optional arm rest kit, make certain to place the control arms in the park brake position and pivot the arm rests upward before placing the seat platform in the full forward position to prevent damage to the arm rests.

#### **Hydraulic system**

The HustlerSport is equipped with two Hydro-Gear EZT integrated pump/motor transmissions (FIG. 18).

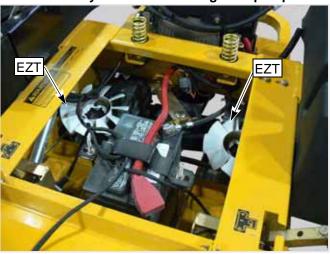


FIG. 18

The EZT integrated pump/motor transmission are sealed for life and do not require any scheduled service. The EZT integrated pump/motor transmissions are filled with 20W50 engine oil. If they ever become low on oil fill to the level shown in FIG. 19..

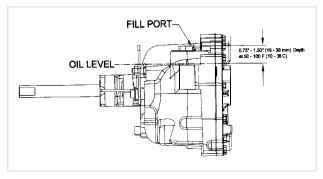


FIG. 19

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#### Fuel system



#### **DANGER: Observe usual fuel handling precautions:**

Do not smoke while refueling.

Do not fill tank with engine running or while engine is hot. Clean up any gasoline spills.

Allow engine to cool before storing machine inside a building.

Keep fuel away from open flame or spark and store machine away from open flame or spark if there is fuel in the tank.

Use extra caution when handling gasoline and other fuels. They are flammable and vapors are explosive. A fire or explosion from gasoline can burn you and others and can damage property. Refuel outdoors preferably, or in well ventilated areas.

Never attempt to start engine when there is a strong odor of gasoline fumes present. Locate and correct cause.

Store gasoline in an approved container and keep it out of the reach of children. Never buy more than a 30 day supply of gasoline.

Always place gasoline containers on the ground away from your vehicle before filling.

Do not fill gasoline containers inside a vehicle or on a truck or trailer as interior carpets or plastic truck bed liners may insulate the container and slow the loss of any static charge.

When practical, remove equipment from the truck or trailer and refuel the equipment with its wheels on the ground. If this is not possible, then refuel the equipment on the truck or trailer using a portable container and not a gasoline dispenser nozzle. If a gasoline dispenser nozzle must be used, keep the nozzle in contact with the rim of the fuel tank or container opening at all times until fueling is complete.



**WARNING:** Gasoline is harmful or fatal if swallowed.

Long-term exposure to vapors can cause serious injury and illness.

Avoid prolonged breathing of vapors.

Keep face away from nozzle and gas tank or conditioner opening.

Keep gas away from eyes and skin.

The fuel tanks are located in the tractor's fenders (FIG. 20). Total capacity for the fuel tanks is 10 U.S. gallons (38 liter).

When filling the fuel tanks disengage deck clutch, place control levers in park brake position, and stop tractor engine. Clean around the fuel tank cap and remove the cap and begin filling. When finished, screw the cap on securely and wipe up any spilled gasoline.

Use regular unleaded gasoline with an octane rating of 87 or higher.

**IMPORTANT:** Never use methanol, gasoline containing methanol, or gasohol containing more than 10% ethanol because the fuel system could be damaged. Do not mix oil with gasoline.

Using a fuel stabilizer/conditioner in the tractor can provide benefits such as:

- 1. Keeps gasoline fresh during storage of 90 days or less. For longer storage, drain the fuel tanks.
- 2. Cleans the engine during operation.
- 3. Eliminates gum-like varnish buildup in the fuel system.

**IMPORTANT:** Do not use fuel additives containing methanol or ethanol.

Add the correct amount of gas stabilizer/conditioner to the gas. Follow the gas stabilizer/conditioner manufacturer's directions for best results.

The fuel filter (FIG. 21) is installed in the fuel line between fuel valve and engine fuel pump on the front of the engine. Replace filter annually or after every 100 hours of operation, whichever occurs first. For fuel filter removal refer to the

engine owner's manual



FIG. 20 FIG. 21

When replacing the fuel filter, check the fuel line hoses for any cracks or leaks. Replace as needed.

## **Engine oil and filter**

Check engine oil daily and after every 4 hours of operation. Crankcase dipstick and oil filler tube are located as shown in FIG. 21 & FIG. 22. Tractor must be setting level when checking oil. Refer to engine manual and maintenance schedule for oil recommendation and capacities.

Change the engine oil and filter after the first 5 hours of operation, per the engine manufacturer's recommendations after that. If tractor is being operated in extremely dirty conditions, then it is recommended oil be changed more frequently. **IMPORTANT:** When removing the oil filter take precautions to minimize oil spillage on the exhaust system.





FIG. 22 FIG. 23

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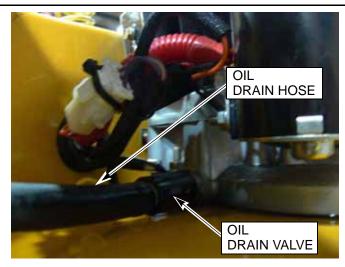


FIG. 24

Attach the oil drain hose (FIG. 24), furnished with the unit, to the oil drain valve when draining the engine oil. Oil drain hose **must** be removed after oil is drained. **IMPORTANT:** All oil drips or spills **must** be cleaned off of the exhaust system before operating the machine. The oil drain and oil filter are located at the rear of the engine (FIG. 23 and FIG. 24).

#### **Belt replacement**

FIG. 25 and FIG. 26 show diagrams and descriptions of the unit's belt drive systems.

Inspect these belts frequently for wear and serviceability. Replace a belt that shows signs of severe cuts, tears, separation, weather checking and cracking, or burns caused by slipping. Slight raveling of belt covering does not indicate failure, trim ravelling with a sharp knife.



WARNING: If the pump belt fails, loss of control will occur especially when operating on a slope. If you lose steering control while operating the machine, place the steering control levers in the park brake position immediately. Inspect the machine and involve your Hustler dealer to resolve the problem before continuing to operate.

Inspect the belt pulley grooves and flanges for wear. A new belt, or one in good condition, should never run against the bottom of the groove. Replace the pulley when this is the case, otherwise belt will lose power and slip excessively. Never pry a belt to get it on a pulley as this will cut or damage the fibers of the belt covering.

Keep oil and grease away from belts, and never use belt dressings. Any of these will destroy the belt composition in a very short time.

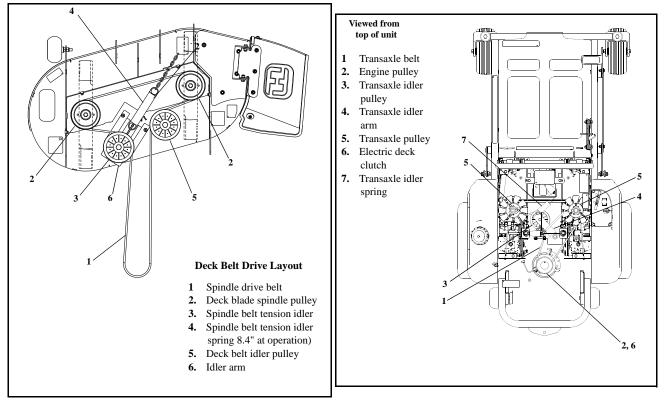


FIG. 25 FIG. 26

#### **Deck belt replacement**

- 1. Park the unit on a flat surface. Stop the engine and remove the ignition key. Make sure deck clutch switch is **in the down (OFF) position**. Place control levers in the park brake position. Disconnect negative battery cable.
- 2. Place the deck in the lowest position.
- 3. Remove the deck belt covers.
- 4. Release the deck belt tension by pulling on the belt tension chain and sliding the chain out of the anchor bracket slot. This will relieve the tension on the deck belt idler spring. FIG. 28
- 5. Pull the idler to the left of the machine to provide maximum belt clearance.
- 6. Remove the existing belt and replace with a new belt.
- 7. Route the new belt per FIG. 25.
- 8. Re-tension the deck belt idler per the Deck drive belt adjustment section located elsewhere in this manual.
- 9. Re-install the deck belt covers.
- 10. Re-attach the negative battery cable.

## Transaxle drive belt replacement

1. Park the unit on a flat surface. Stop the engine and remove the ignition key. Make sure deck clutch switch is **in the down (OFF) position.** Place control levers in the park brake position. Disconnect negative battery cable.

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2. Place the deck in the lowest position.

3. The deck belt must be removed from the clutch pulley first by releasing the deck belt tension by pulling on the belt tension chain and sliding the chain out of the anchor bracket slot. This will relieve the tension on the deck belt idler spring (FIG. 27).

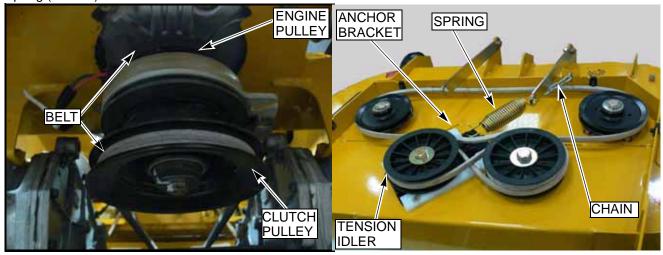


FIG. 27 FIG. 28

- 4. Remove the deck drive belt from the electric clutch pulley. This belt does not need to be removed from any of the other pulleys.
- 5. Release the tension from the transaxle belt by pulling on the idler pulley (extending spring carefully) and sliding the belt over it. Use caution when releasing the idler pulley as there is still tension on it and it will snap back into position (FIG. 26).
- 6. Slide the belt off the engine pulley. The belt will have to be slid above the engine pulley to allow the belt to be removed from the other pulleys (FIG. 27).
- 7. Slide the belt over the transaxle pulleys.
- 8. Slide the belt off of the fixed idler pulley.
- 9. The belt can now be removed from above the engine pulley.
- 10. Install new belt by sliding it up and over the engine pulley. Make certain it is not in the pulley groove at this time but is above the pulley.
- 11. Slide the belt over the fixed idler pulley and then over the transaxle pulleys.
- 12. Slide the belt onto the engine pulley.
- 13. Pull the idler pulley over and slide the belt onto it. Make certain to keep fingers from getting between the belt and the pulley when the pulley is released and tension is re-established.
- 14. Re-install the deck drive belt on the electric clutch pulley and make sure it is routed properly on all of the deck pulleys.
- 15. Re-tension the deck belt idler per the Deck drive belt adjustment section located elsewhere in this manual.
- 16. Re-attach the negative battery cable.

## Mower blade maintenance

Check the mower blades daily, they are the key to power efficiency and well groomed turf. Keep them sharp, a dull blade will tear rather than cut the grass, leaving a brown ragged top on the grass within a few hours. A dull blade also requires more power from the engine.

Replace any blade which is bent, cracked or broken.



**WARNING:** Never attempt to straighten a bent blade by heating, or weld a cracked or broken blade as the blade may break and cause serious injury. Replace worn or damaged blades.



**WARNING:** Never work with blades while engine is running or deck clutch switch is engaged (on). Always place deck clutch switch in the **disengaged** position, place control levers in the park brake position and turn engine off and disconnect negative battery cable. Block up mower when you **must** work under it. Wear gloves when handling blades. **Always check for blade damage** if mower strikes rock, branch or other foreign object during mowing!



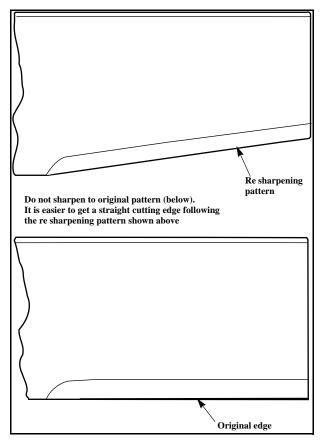


FIG. 29

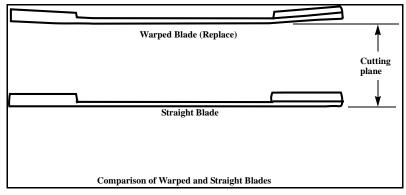


FIG. 30

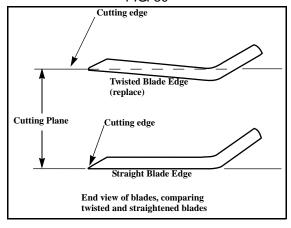


FIG. 31

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#### Mower blade removal

Use a 15/16" wrench to remove the 5/8" cap screw holding the blade to the spindle shaft from underneath. Blade Lock Tool, part number 381442, is available from your dealer to prevent the blades from turning while removing or and installing the blade bolts.

Sharpen the blades on a grinder following pattern as shown (FIG. 29). Touch-up sharpening can be done with a file. Check the blades for balance following grinding. A commercial balancing tool is available through most hardware supply stores, or balancing can be done by placing the blade on an inverted line punch or 5/8" bolt. Blade should not lean or tilt. Spin the blade slowly, blade should not wobble. If blade is out of balance, true it up before reinstalling.

Lay the blade on a flat surface and check for distortion (FIG. 30 and FIG. 31). Replace any distorted blade.

Do not re-use spindle bolts which have stripped, worn or undercut threads. Torque bolts on spindles to 118 foot-pounds when reinstalling blades.

**IMPORTANT:** The blade sail (curved part) must be pointing upward toward the inside of the deck to ensure proper cutting.



**WARNING:** When mounting blades, rotate them after installation to ensure blade tips do not touch each other or sides of the mower.



**WARNING:** Failure to correctly torque the bolt may result in the loss of the blade which can cause serious injury.



**WARNING:** Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves and use extra caution when servicing them.

# Adjustment

#### Introduction

Your FasTrak Super Duty 48/54 was adjusted before it left the factory and was checked during pre delivery setup. However, after start-up and continued use, a certain amount of break-in wear will cause some adjustments to change.

Remain alert for unusual noises, they could be signaling a problem. Visually inspect the machine for any abnormal wear or damage. A good time to detect potential problems is while performing scheduled maintenance service. Correcting the problem as quickly as possible is the best insurance.

Clear away heavy build-up of grease, oil and dirt, especially in the engine and under the seat platform areas; minute dust particle are abrasive to close-tolerance engine and hydraulic assemblies.

Some repairs require the assistance of a trained service mechanic and should not be attempted by unskilled personnel. Consult your Hustler service center when assistance is needed.

#### **Control lever adjustment**

The control levers can be adjusted for operator comfort. By loosening the nuts that attaches the upper control lever to the lower lever (FIG. 32), the upper control lever can be pivoted to fit the operator's personal preference.

The control levers can also be adjusted up and down. Remove the cap screws and slide the upper control lever up or down and align the holes in it with the holes in lower lever. Re-install the nuts and tighten.

The control levers should be adjusted so that they align with each other when in the neutral position (FIG. 33).

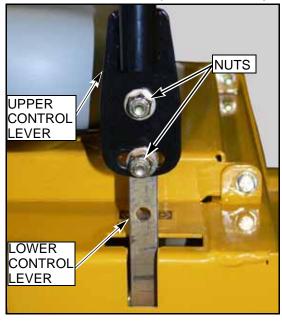




FIG. 32 FIG. 33

## Steering linkage

The neutral adjustment for the control levers in the neutral position is discussed in this section.

The tractor steering has been factory adjusted to eliminate creeping when the control levers are in the neutral

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position (FIG. 34). However, should the tractor begin to creep, the control lever linkage can be adjusted as follows:



FIG. 34

#### CONTROL LEVER NEUTRAL ADJUSTMENT

Before considering any adjustment, check the tire air pressure. Unequal tire pressure will cause the tractor to drift to one side. Refer to tire pressure information in the Maintenance section of this manual.

NOTE: Proper park brake adjustment must be completed before the control lever neutral adjustment can be done.

Fine adjustment to the unit's steering is made with the transaxle control rod. (FIG. 35).

Neutral is properly adjusted when the control levers are in the park brake position and the ZT 2800 transaxles do not "whine".

If this occurs, the control linkage may be adjusted as follows:

1. Park the unit on a flat surface, raise the rear of the tractor and block with certified jack stand. With the park brakes set, start the engine (FIG. 37). Once the engine is started, if the ZTs whine while the park brake is engaged, then neutral needs to be reset. Turn off the engine.



**WARNING:** Never work under the machine or attachment unless it is safely supported with jack stands. Make certain machine is secure when it is raised and placed on the jack stands. The jack stands should not allow the machine to move when the engine is running and the drive wheels are rotating. **Use only certified jack stands.** Use only appropriate jack stands, with a minimum weight rating of 2000 pounds to block the unit up. Use in pairs only. Follow the instructions supplied with the vehicle stands.



**WARNING:** This is a dangerous operation - keep hands, hair, clothing, etc., clear of the cooling fans on top of the ZTs! *Exercise extreme caution.* 



**WARNING:** .Never attempt to make any adjustments or repairs to the tractor drive system while the engine is running. **The following procedures should be performed by trained maintenance personnel only.** 

- 2. Loosen and back off the jam nuts on both ends of the steering control rod assembly (FIG. 35). Set the steering control lever in the neutral/brake position.
- 3. Remove the female spade connectors from the seat switch (located under the seat). These will need to be connected together now to bypass the seat switch to perform the following functions. **This must only be done by a qualified Hustler Dealer.**
- 4. Make sure the steering damper ball studs attached to the frame at the rear of the damper on either side are loose and allowed to slide in the slot.

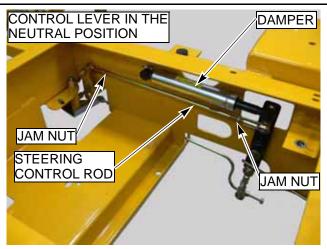




FIG. 35 FIG. 36

- Both steering control levers need to be in the brake position when starting the engine, but need to quickly be moved out of the brake position once engine is started so the brakes do not fight the transmissions since they have not yet been adjusted.
- 6. Start the engine. Move the control lever to just engage the brake (neutral) slot and hold it in that position (Do not engage the control lever far enough to engage the brakes in the brake slot) (FIG. 36).



**WARNING:** This operation is extremely dangerous. Pay close attention when adjusting the transaxle control rod so you do not get your fingers, tools, or anything else close to the EZT transaxle's cooling fans.

- 7. Beginning with the RH side of the tractor, adjust the steering control rod so that the RH drive axle just starts turning in the forward rotation while the steering lever remains in the neutral positon. Now, turn the steering rod back the opposite direction to the point when the drive axle stops spinning. From that point, turn the steering rod back again ½ turn. This ensures that the steering rod is adjusted so that the transmission control arm is centered in the neutral band of the transmission.
- 8. Move the lever forward and backward and make sure that the drive axle spins forward and backward correctly. Return the steering lever to neutral and re-check to make sure the drive axle is stopped in the neutral position. Lock the steering control lever into the brake position. You should not hear the transmission whine if neutral is properly set.



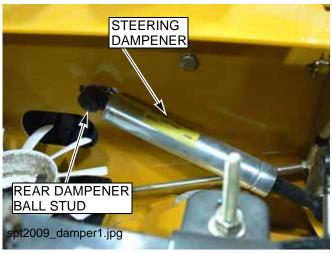


FIG. 37 FIG. 38

- 9. Turn off the engine.
- 10. With the engine off, move the RH steering control lever into the neutral position and pull the lever all the way back to the rear of the tractor as if you were going full speed in reverse. Now, slowly bring the lever back to the neutral position and lock it into the brake position. This sets the steering damper in the correct neutral position. Tighten the ball stud at the rear of the damper that is attached to the frame side panel on the RH side (FIG. 38). Once this

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is tightened, you should be able to move the steering control lever to the reverse position, let it go, and the steering lever should return itself to the neutral position. This should finish the adjustment for the RH side steering control. Double check to make sure you have all fasteners tightened to the correct torque specifications.

- 11. Repeat steps 4 thru 9 for the LH side.
- 12. Once both sides are properly adjusted, double check them together to make sure everything is working properly.
- 13. **IIMPORTANT:** With the engine off, disconnect the two female spade connectors from each other (from step #3) and reconnect them to the seat switch. This must be completed so the safety circuit is functioning properly. Refer to the machine's owner's manual for operation check.



**WARNING:** Do not operate the tractor without plugging the tractor wiring harness into the seat switch. This switch is an important part of the safety start interlock system. Serious injury can result if the seat switch is not plugged into the tractor's wiring harness.

- 14. Check to make sure all tools or obstructions are removed from under the tractor. Assemble the drive wheels and lugnuts. Torque the lugnuts to 65-75 ft-lbs.
- 15. Jack up the rear of the tractor and remove the jack stands. Lower the tractor to the ground and remove the jack.
- 16. The control levers should be adjusted so that they align vertically with each other when in the neutral position (FIG. 33). Space between ends of control handles to be .50" ±.25".
- 17. Check the hydraulic oil level after final adjustments. Make sure oil level is within operating range specified.

#### Steering dampener

The steering dampener (FIG. 38) is spring loaded to return the control levers to the neutral position from the reverse position. This gives the operator a sense of neutral during operation.

If the tractor does not return to neutral from reverse then adjust as follows:

To set the steering dampeners in the correct operating position follow these steps:

- 1. Shut engine off, place control levers in the park brake position, disengage deck clutch, remove ignition switch key and disconnect negative battery cable before doing any adjustments.
- 2. Place the control lever in the neutral position (FIG. 34).
- 3. Loosen the steering dampener's rear ball stud (FIG. 38).
- 4. Pull the dampener spring housing, to the rear, past the point that the internal spring is engaged.
- 5. Release the dampener spring housing and allow the internal spring to bring the housing back to the neutral posi-
- 6. Tighten the nut on the steering dampener's rear ball stud.
- 7. To check, move the control lever to the reverse position and release. The control lever should return to the neutral position. If not, repeat steps 1 through 6.

## Park brake spring adjustment

Occasionally check the park brake spring adjustment using the following method:

- 1. Shut engine off, place control levers in the park brake position, disengage deck clutch, remove ignition switch key and disconnect negative battery cable before doing any adjustments.
- 2. Position the control lever in the park brake position.

3. Measure the park brake spring. It should be compressed to 1-7/16". If it is not, adjust the nylock nut until the proper spring compression is achieved (FIG. 39).

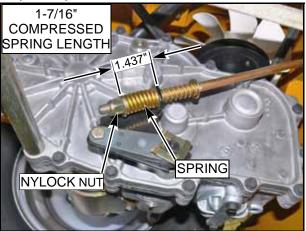


FIG. 39

4. Repeat for the other side.

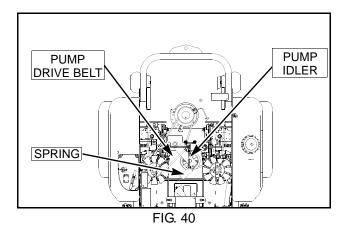
#### Hydraulic pump belt adjustment

The transaxle drive belt tension remains constant by means of a tension idler and spring (FIG. 40). There is no tension adjustment of this belt.

NOTE: Inspect the belt every 100 hours and replace as needed. Replace the belt every 200 hours or every two (2) years whichever comes first.



**WARNING:** If the transaxle belt fails, loss of control will occur especially when operating on a slope. If you lose steering control while operating the machine, place the steering control levers in the park brake position immediately. Inspect the machine and involve your Hustler dealer to resolve the problem before continuing to operate.



# **Deck drive belt adjustment**

The spindle belt tension remains constant by means of a tension idler and spring (FIG. 41). The spring tension

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should be such that the belt does not slip under normal operating load conditions, assuming the belt is not excessively

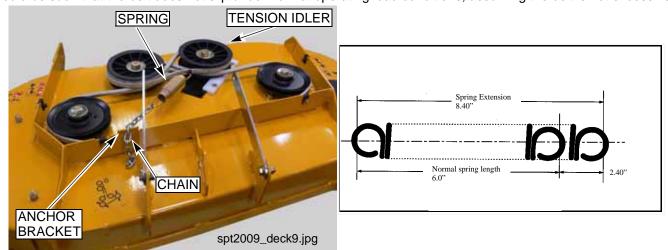


FIG. 41 FIG. 42

worn or damaged. As belt stretches and wears in, adjustment may become necessary. To increase belt tension, move the spring chain one (or more) link(s) at the anchor bracket (FIG. 41). Installed spring length should be  $8.40" \pm .3"$  originally with adjustments of .60" per chain link (FIG. 41).

**IMPORTANT:** Do not over tension the spring to compensate for a badly worn belt or pulley.

#### **Engine RPM setting**

The FasTrak Super Duty 48/54 is designed so that the engine will run at 3600 rpm with transaxle load only. At this speed the transaxles are running at their maximum rated speed.

#### **Deck leveling and height adjustment**

The mower deck has three areas that may need to be checked and adjusted periodically. Before considering any mower deck leveling adjustments, check that the tire air pressure is within the specified range.

#### **DECK LEVEL ADJUSTMENTS**

Leveling the deck must be done in the following manner and order:

 Check tire pressures to make certain they are properly inflated before starting to level deck. The recommended pressures are as follows:

| Drive Wheels | 8-12 PSI |  |  |
|--------------|----------|--|--|
| Front Wheels | 8-12 PSI |  |  |



**WARNING:** Stop engine. Make sure deck clutch switch is **in the down (OFF) position**. Remove ignition key. Place control levers in the brake position before leaving machine.

- 2. Drive tractor onto hard flat surface.
- 3. Raise and lock deck into transport position.
- 4. Place 3.0" high deck support blocks under deck at the four corners shown in FIG. 43

(two stacked 2"x4" blocks can be used to create a 3.0" support).

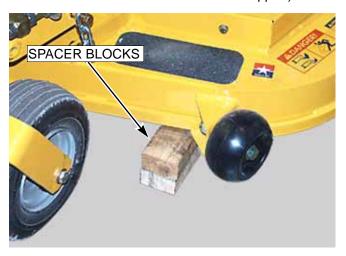


FIG. 43

- 5. Remove the deck stop pin and lower the deck until it rests on the support blocks.
- 6. Loosed the (3) bolts attaching the (3) deck links to the deck.
- 7. Push the lift pedal forward, place the deck stop pin in the indicator hole marked 3.25", and release the pedal.
- 8. Use a bungee cord th pull the pedal rearward so that the crank lever is held firmly against the stop pin and play in the pivot joint is removed (FIG. 44).



FIG. 44

9. Tighten the (3) deck links to deck with flanged nuts clamping on either side of slot with 48 ft-lbs of torque.

Remove bungee cord and ensure that deck can be raised and locked into transport position.

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