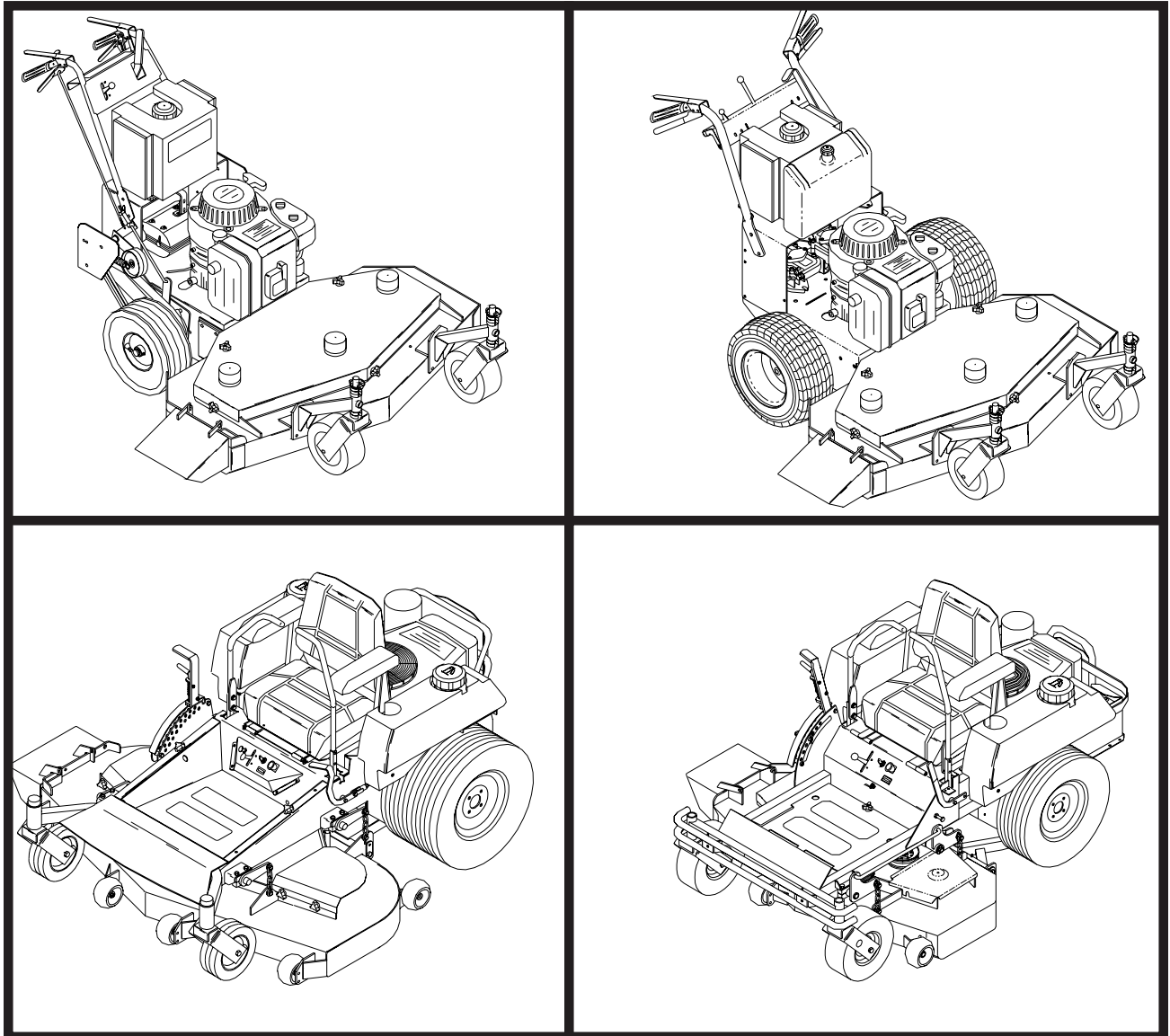


For Husqvarna Parts Call 606-678-9623 or 606-561-4983

# Husqvarna



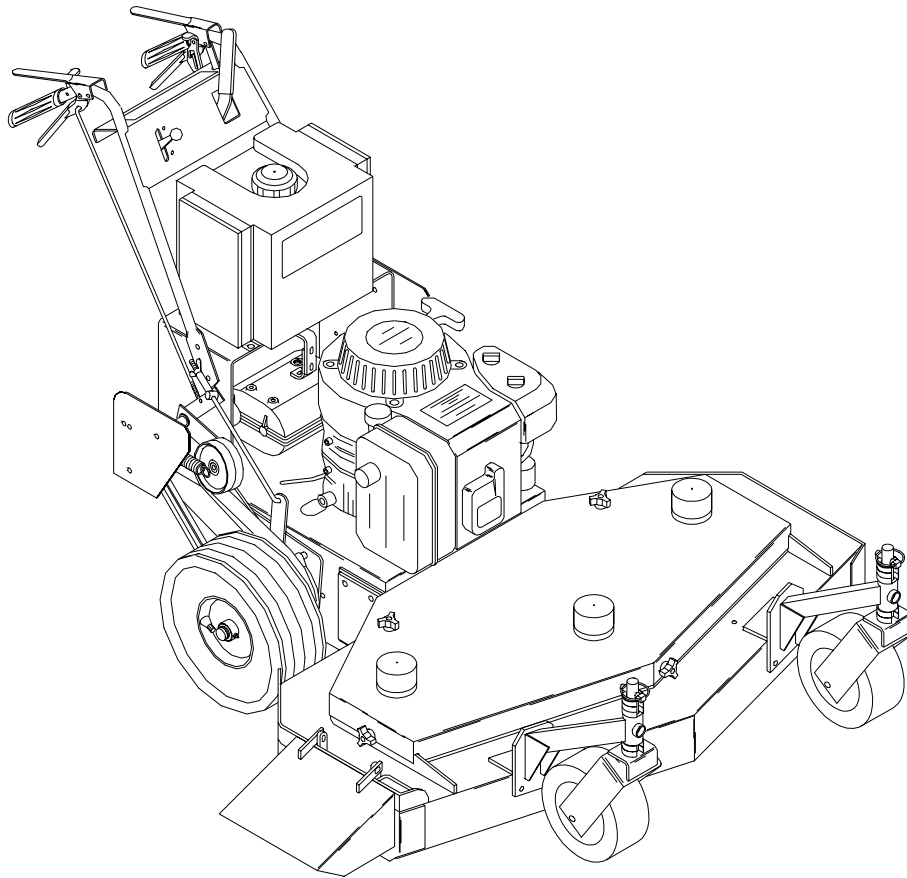
## Setup manual for:

Gear Drive,ETS Gear Drive, Walk Hydro, ETS Walk Hydro, Mini Rider, Large Rider Gen 2

MANUAL NO. 539105470 REV. 01(03/14/02)

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

## Gear Drive Intermediate Walk Behind



### Setup Instructions for:

MODELS / I.D. : 968999101 / W3212A  
968999107 / W3213A  
968999102 / W3612A  
968999108 / W3613A  
968999103 / W3614A  
968999104 / W4814A  
968999110 / W4815A

## SETUP FOR HUSQVARNA 32", 36" AND 48" COMMERCIAL MOWERS

### FRONT CASTER WHEELS

1. Mount front caster wheel assemblies. Installation includes fastening casters to front of the cutter deck using 3/8 x 1" hex head capscrews.

### FUEL TANK

1. Mount fuel tank to tank support. Secure with the two tank straps, four 1/4" bolts, and four 1/4" nuts. Tighten until snug, but do not over tighten or crush the tank.

### HANDLE ASSEMBLY

1. Align the upper mounting holes in handle with the upper hole in the tank support.
2. Install two 3/8" x 1" screws through matched holes and loosely install 3/8" nuts.
3. Align the lower holes and install hardware as above, tighten upper and lower hardware.

### LINKAGE INSTALLATION

1. Install traction linkage to swivels in bellcrank mounted to the tank support on each side of the mower. Traction linkages are located on the upper handle, fastened to the traction levers. To fasten linkage to swivel, first disconnect linkage from traction levers, then screw linkage into swivel. Reassemble linkage into traction lever.
2. Install shifter to transmission with 1/4" x 1" screws. The shifter is located in the inner box and hardware is pre-assembled into the bracket on the transmission.
3. Install blade control rod into the bellcrank on the left side of the tank support. Secure rod with ring type retainer.
4. Refer to the section of this manual on adjustments for the proper adjustment of the linkages you are installing. The linkages were set at the factory but must be checked before operating mower to insure of the proper setting. Always check 100% of the adjustments before you operate the mower.
5. Connect the two halves of the wiring harness together. The four prong connectors have a locking tab that shows which way to line them up and guarantees that they are connected properly when the lock snaps.
6. Install the chute deflector to the side of the mower deck. Bolt it into place using the two 5/16" x 1" screws and nuts pre-assembled into the mounting tabs on the deck. Tighten the screws very securely with the chute completely covering the discharge opening and tight against the side of deck.

### THROTTLE INSTALLATION

1. Connect the throttle cable end to the throttle mechanism on engine, leaving the cable clamp loose. Push throttle lever on console completely forward. Then pull the cable through the clamp on engine and tighten the cable clamp. Move the throttle lever back and forth to ensure proper installation.

### GAS LINE INSTALLATION

1. The gas line is factory installed on the engine. Attach loose end to fuel tank hose barb and secure with hose clamp.

### POSITIONING THE FRONT CASTER SPACERS

1. Using the cutting height chart, find the correct number of spacers to be placed under the caster swivel.
2. Remove the lynch pin and washer from the top of caster and reposition spacers to the desired cutting height from the chart. See figure # 2

### AXLE HEIGHT ADJUSTMENT

1. To adjust rear axle, stop engine and place drive levers in the neutral lock position, remove spark plug wire.
2. Remove lower belt shield from underside of rear deck for better access to axle adjustment bolts.
3. Loosen axle pivot bolts and axle adjustment bolts. See figure # 1.
4. Place a jack under center of rear deck raise the jack slightly so axle adjustment bolts may be removed.
5. With the jack raise or lower the rear deck to the desired position using the chart to ensure proper height. Reinstall the axle adjustment bolts and tighten. A tapered punch may be used to help align the holes. See figure #1.

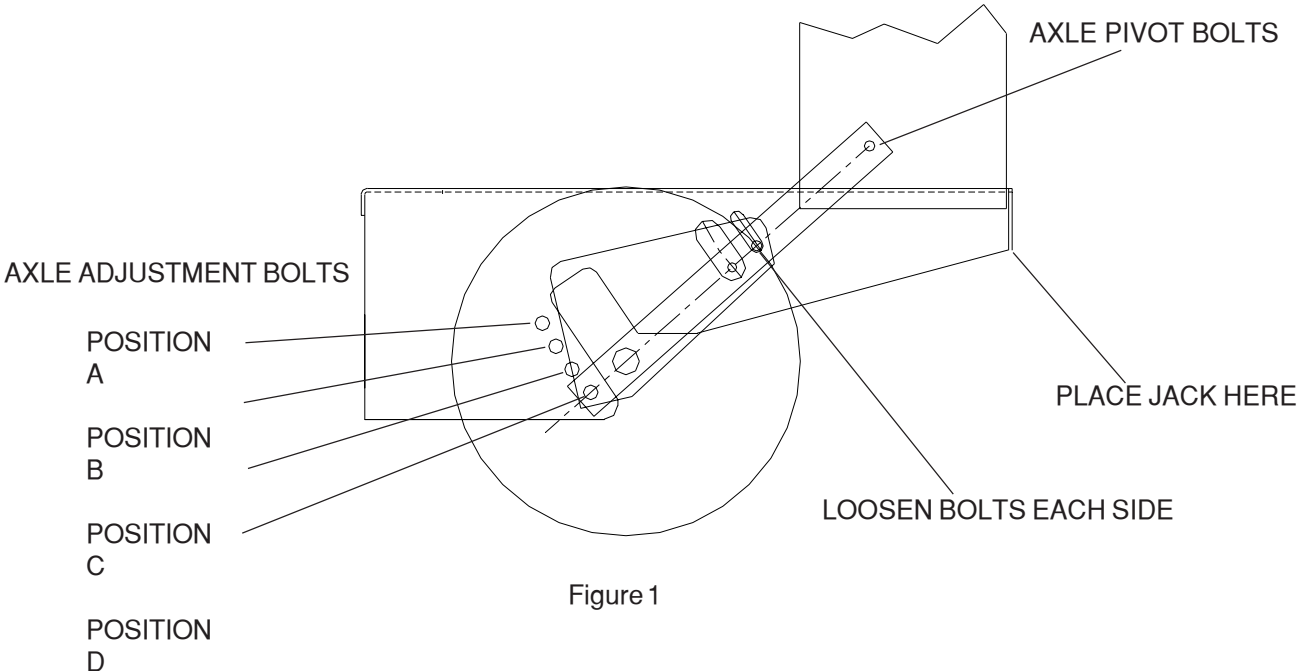
#### NOTE:

It may be necessary to readjust drive and brake linkages.

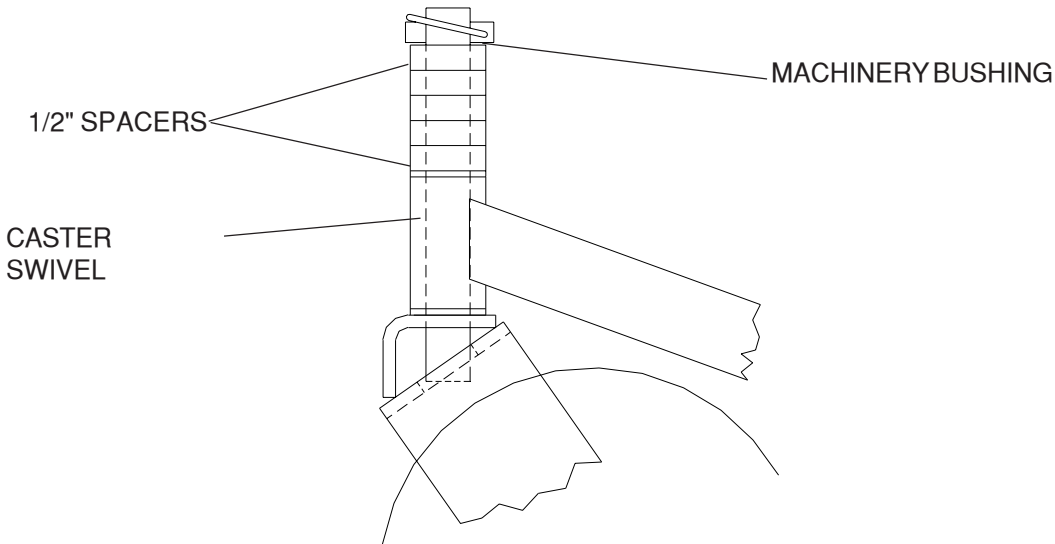
#### NOTE:

To achieve the best quality cut, the blades should be level with the ground or slightly tipped forward

**REAR AXLE HEIGHT ADJUSTMENT**

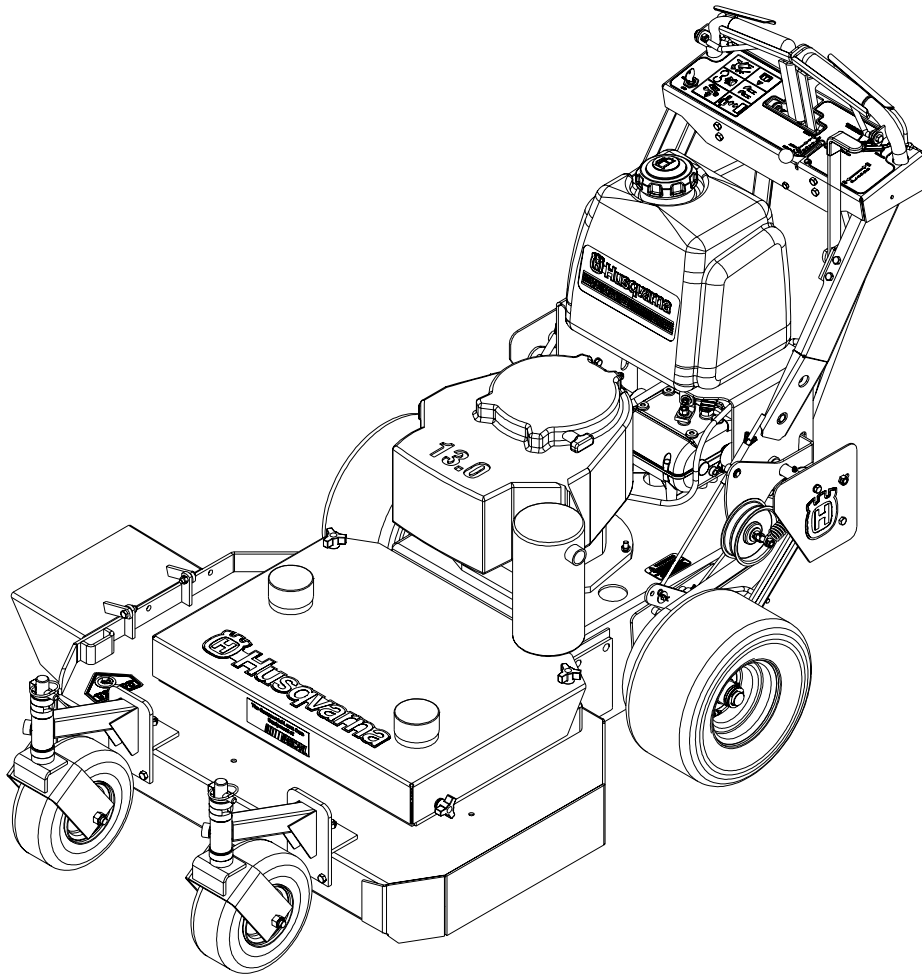


**CASTER HEIGHT ADJUSTMENT**



For Husqvarna Parts Call 606-678-9623 or 606-561-4983

## ETS Gear Drive Intermediate Walk Behind



Setup Instructions for:

968999117 / W3613ETS

968999120 / W4815ETS

## Setup & Adjustments

### MAINTENANCE

1. Keep all nuts, bolts, and screws tight to keep mower in safe operating condition.
2. Never store the mower with gas in the tank inside a building where fumes can reach an open flame or spark. Allow engine to cool before storing in an enclosure.
3. To reduce fire hazard, keep mower free of grass, leaves, or excessive grease.
4. Check grass catcher assembly frequently for wear or deterioration. Replace bag if loose seams or tears are evident.
5. Have your mower inspected and serviced each year by an authorized **HUSQVARNA** dealer. Determine if any additional devices are available which might upgrade the safety of your mower.
6. Use only authentic **HUSQVARNA** replacement parts to insure the safety and quality of your mower is maintained.
7. Safety decals should be replaced if they are missing or illegible. Decals may be purchased from your **HUSQVARNA** dealer.

### FRONT CASTER WHEELS

1. Mount front caster wheel assemblies. Installation includes fastening casters to front of the cutter deck using 3/8 x 1" hex head capscrews.

### FUEL TANK

1. Place fuel tank on tank support, making sure to get the studs through the slots on the top of the tank support. Place the 5/16" flat washer, spring, the other 5/16 flat washer and the 5/16" nut on the stud. Snug 5/16" nut, but do not over tighten.

### HANDLE ASSEMBLY

1. Align the upper mounting holes in handle with the upper hole in the tank support.
2. Install two 3/8" x 1" screws through matched holes and loosely install 3/8" nuts.
3. Align the lower holes and install hardware as above, tighten upper and lower hardware.

### LINKAGE INSTALLATION

1. Install drive linkage into the hole in the idler arm on the inside of the tank support. The drive linkages are fastened to the drive levers on the handle assembly. Secure the drive linkages to the idler arm by inserting a retaining ring through the small hole in the end of the drive linkage.
2. Install shifter to transmission with 1/4" x 1" screws.  
The shifter is located in the inner box and hardware is pre-assembled into the bracket on the transmission.
3. Install blade control rod into the bellcrank on the left side of the tank support. Secure rod with ring type retainer.
4. Refer to the section of this manual on adjustments for the proper adjustment of the linkages you are installing. The linkages were set at the factory but must be checked before operating mower to insure of the proper setting. Always check 100% of the adjustments before you operate the mower.
5. Connect the two halves of the wiring harness together. The four prong connectors have a locking tab that shows which way to line them up and guarantees that they are connected properly when the lock snaps.
6. Install the chute deflector to the side of the mower deck. Bolt it into place using the two 5/16" x 1" screws and nuts pre-assembled into the mounting tabs on the deck. Tighten the screws very securely with the chute completely covering the discharge opening and tight against the side of deck.

### THROTTLE INSTALLATION

1. Connect the throttle cable end to the throttle mechanism on engine, leaving the cable clamp loose. Push throttle lever on console completely forward. Then pull the cable through the clamp on engine and tighten the cable clamp. Move the throttle lever back and forth to ensure proper installation.

## Setup & Adjustments

### GAS LINE INSTALLATION

1. The gas line is factory installed on the engine. Attach loose end to fuel tank hose barb and secure with hose clamp.

### POSITIONING FRONT CASTER SPACERS

1. Using the cutting height chart, find the correct number of spacers to be placed under the caster swivel.

2. Remove the lynch pin and washer from the top of caster and reposition spacers to the desired cutting height from the chart. See figure # 2

### AXLE HEIGHT ADJUSTMENT

1. To adjust rear axle, stop engine and place drive levers in the neutral lock position, remove spark plug wire.

2. Remove lower belt shield from underside of rear deck for better access to axle adjustment bolts.

3. Loosen axle pivot bolts and axle adjustment bolts. See figure # 1.

4. Place a jack under center of rear deck raise the jack slightly so axle adjustment bolts may be removed.

5. With the jack raise or lower the rear deck to the desired position using the chart to ensure proper height. Reinstall the axle adjustment bolts and tighten.

A tapered punch may be used to help align the holes. See figure #1.

### NOTE:

It may be necessary to readjust drive and brake linkages.

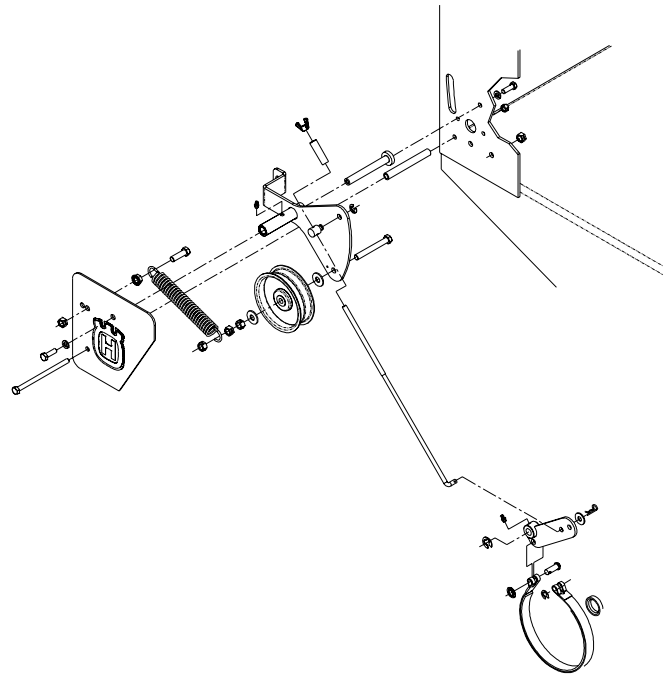
### NOTE:

To achieve the best quality cut, the blades should be level with the ground or slightly tipped forward

### BRAKE ROD ADJUSTMENT

1. Make sure the rod is installed into the proper hole in the brake arm. The brake rod should be in bottom hole on the brake arm as shown below. **Never use the upper hole.** The proper adjustment can not be achieved in this position.

2. To increase braking. Turn the wing nut down on the brake rod. **Do not** turn the wingnut down to far as this will result a constant braking action and will excessively wear the brake band and cause premature failure.



# For Husqvarna Parts Call 606-678-9623 or 606-561-4983

## Setup & Adjustments

### REAR AXLE HEIGHT ADJUSTMENT

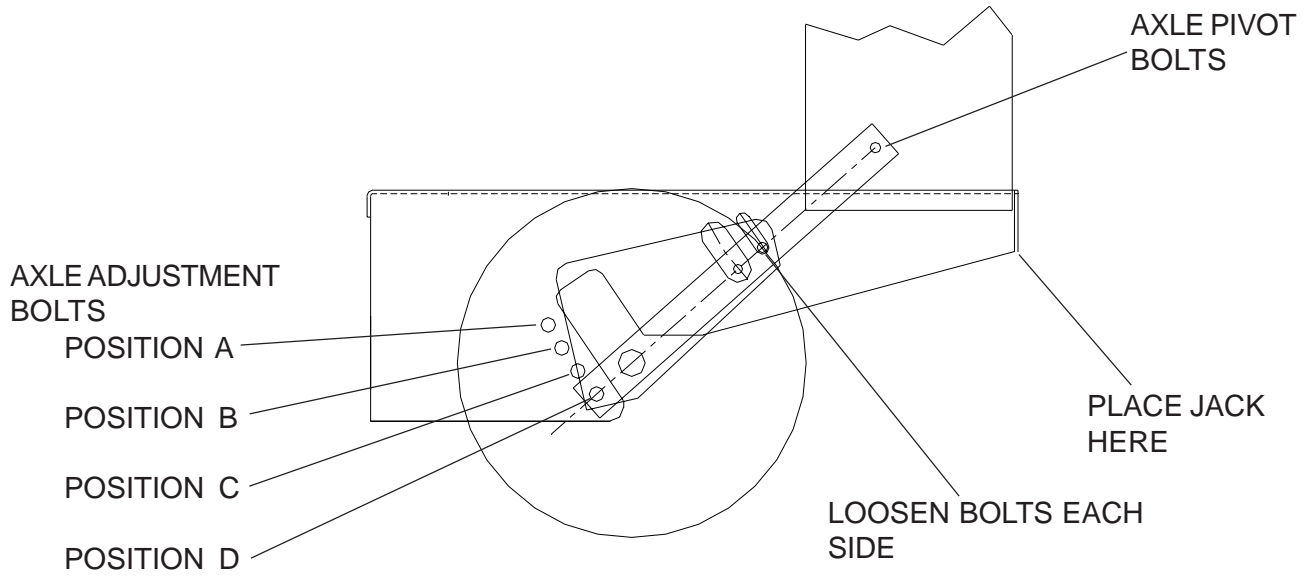


Figure 1

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### CASTER HEIGHT ADJUSTMENT

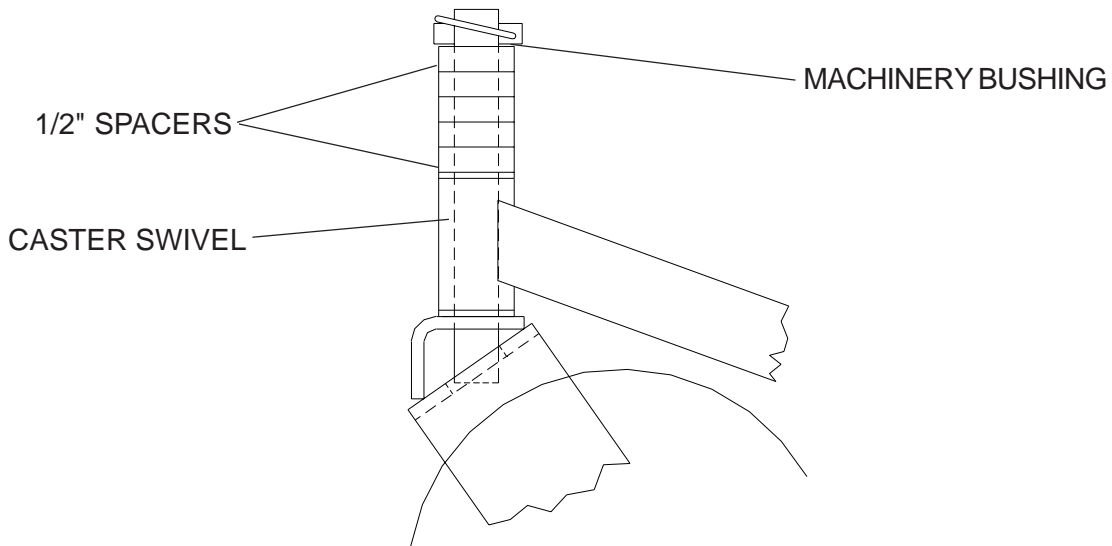


Figure 2



## Setup & Adjustments

### CUTTING HEIGHT ADJUSTMENT CHART

| AXLE POSITION | NUMBER OF SPACERS BELOW CASTER ARM | NUMBER OF 1/4" BLADE SPACERS UNDER CUTTER HOUSING | CUTTING HEIGHT (IN INCHES) |
|---------------|------------------------------------|---|----------------------------|
| A             | 0                                  | 4   | 1 1/2                      |
|               |                                    | 3   | 1 3/4                      |
|               |                                    | 2   | 2                          |
|               |                                    | 1   | 2 1/4                      |
|               |                                    | 0   | 2 1/2                      |
|               | 1                                  | 4   | 1 3/4                      |
|               |                                    | 3   | 2                          |
|               |                                    | 2   | 2 1/4                      |
|               |                                    | 1   | 2 1/2                      |
|               |                                    | 0   | 2 3/4                      |
| B             | 2                                  | 4   | 2 1/2                      |
|               |                                    | 3   | 2 3/4                      |
|               |                                    | 2   | 3                          |
|               |                                    | 1   | 3 1/4                      |
|               |                                    | 0   | 3 1/2                      |
|               | 3                                  | 4   | 3                          |
|               |                                    | 3   | 3 1/4                      |
|               |                                    | 2   | 3 1/2                      |
|               |                                    | 1   | 3 3/4                      |
|               |                                    | 0   | 4                          |
| C             | 3                                  | 4   | 3 1/4                      |
|               |                                    | 3   | 3 1/2                      |
|               |                                    | 2   | 3 3/4                      |
|               |                                    | 1   | 4                          |
|               |                                    | 0   | 4 1/4                      |
|               | 4                                  | 4   | 3 1/2                      |
|               |                                    | 3   | 3 3/4                      |
|               |                                    | 2   | 4                          |
|               |                                    | 1   | 4 1/4                      |
|               |                                    | 0   | 4 1/2                      |
| D             | 4                                  | 4   | 3 3/4                      |
|               |                                    | 3   | 4                          |
|               |                                    | 2   | 4 1/4                      |
|               |                                    | 1   | 4 1/2                      |
|               |                                    | 0   | 4 3/4                      |
|               | 5                                  | 4   | 4                          |
|               |                                    | 3   | 4 1/4                      |
|               |                                    | 2   | 4 1/2                      |
|               |                                    | 1   | 4 3/4                      |
|               |                                    | 0   | 5                          |

1. To quickly achieve small changes in cutting heights, move the spacers from under the cutter housing to above the cutter pulley. (Each spacer moved will give an additional 1/4" of cutting height ).

USE ONLY 4 BLADE SPACERS MAXIMUM

## Setup & Adjustments

### BRAKE / TRACTION ADJUSTMENT

1. Disconnect the brake linkage from the brake band arm.
2. With the mower in gear, place the drive levers in the drive position. Firmly pull back on the handles until the tires slide to seat the drive belts into the pulleys.
3. Measure the distance between the back drive lever slot and the neutral bail. It should be between  $3/16$  and  $1/4$ " but not exceeding  $1/4$ ". See Figure #3.
4. If the clearance is less than  $3/16$ ", disconnect the drive lever from the idler arm by removing the retaining ring.
5. Adjust the drive linkage to the proper clearance by screwing it into the yoke at the drive lever end of the linkage. This will achieve proper clearance if the distance is less than  $3/16$ ". Screw the linkage out if it is greater than  $1/4$ ".

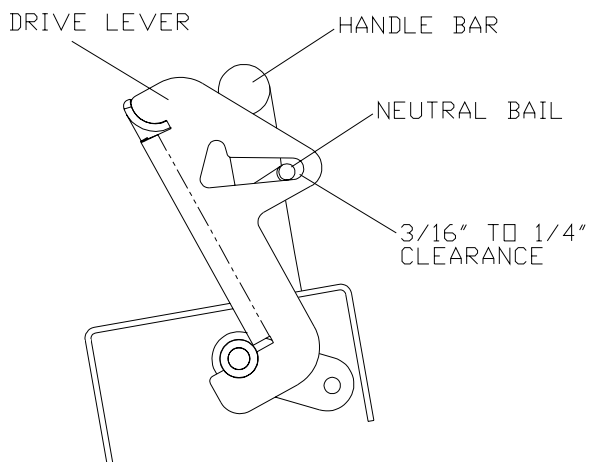


Figure 3

#### NOTE:

More or less brake pressure may be desired depending on the operator or conditions of operation. To increase pressure tighten the wing nut on the brake linkage.

### OPERATOR PRESENCE SWITCH ADJUSTMENT

The operator presence switches can be adjusted by loosening the screws on the back side of the console and sliding the switch left or right. The O.P. switch plunger should just come in contact with the O.P. lever when the operator presence levers are released.

### BLADE SWITCH ADJUSTMENT

The blade engagement switch can be adjusted by loosening the screws on the blade engagement bracket and moving the switch up or down. The blade switch should be adjusted so the plunger is fully depressed when the engagement lever is fully disengaged.

### ADJUSTMENTS - DRIVE BELTS

For all drive belts, tension should be set so that belt vibration is minimized or eliminated when belts are moving during normal operation. A properly tensioned belt should have  $1/4$ " to  $3/8$ " deflection at the center of belt span between pulleys when blades are engaged. Blade drive belt tension is preset at the factory.

#### NOTE:

**DO NOT** over tighten belt. Excessive tension will decrease belt and spindle bearing life.

### BLADE DRIVE BELT ADJUSTMENTS

#### WARNING

**BEFORE PERFORMING ADJUSTMENTS ON BLADE BELT, TURN MOWER OFF, CLOSE FUEL VALVE, AND DISCONNECT SPARK PLUG WIRE.**

1. Remove front deck belt shield.
2. Loosen whiz nut on turnbuckle.
3. Set belt tension when engagement lever is in the engaged position.
4. To increase belt tension rotate turnbuckle toward the rear of the mower until desired tension is gained. Do not over tighten belts, too much tension will reduce belt and spindle bearing life. See figure # 6
5. Tighten whiz nut on turnbuckle and install belt shield.

## AUXILIARY BLADE DRIVE BELT (48" MODELS ONLY)

To adjust tension of the auxiliary belt rotate nut on linkage that is attached to deck strap located on the right side of cutter deck. See Figure 6.

## TRANSMISSION DRIVE BELT

To increase the tension of the transmission belt, loosen the nut on the underside of the transmission idler pulley located under the rear deck, slide the idler assembly inward to increase tension and tighten the nut to secure. See figures 4 & 5.

## BELT GUIDES

Belt guides under rear deck are adjusted as shown in figures 4 and 5

**NOTE: The blades should come to a stop from maximum speed within 7 seconds after disengaging.**

## BLADE ENGAGEMENT LEVER

The blade engagement lever needs to be adjusted so the lever does not come in contact with control panel when the lever is in the off position.

To adjust, remove the clevis pin from the yoke and adjust by turning the yoke. The clevis pin connects the blade engagement lever to the yoke, and the yoke is connected to the blade engagement rod that runs to the bellcrank on the rear deck.

### 36" MODEL

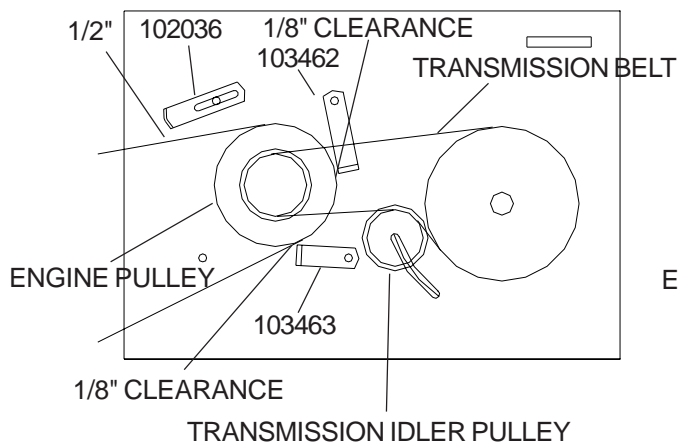


Figure 4

### 48" MODEL

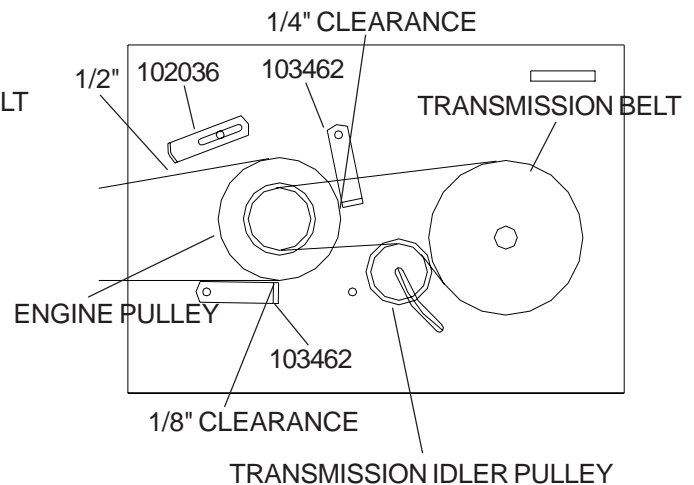


Figure 5

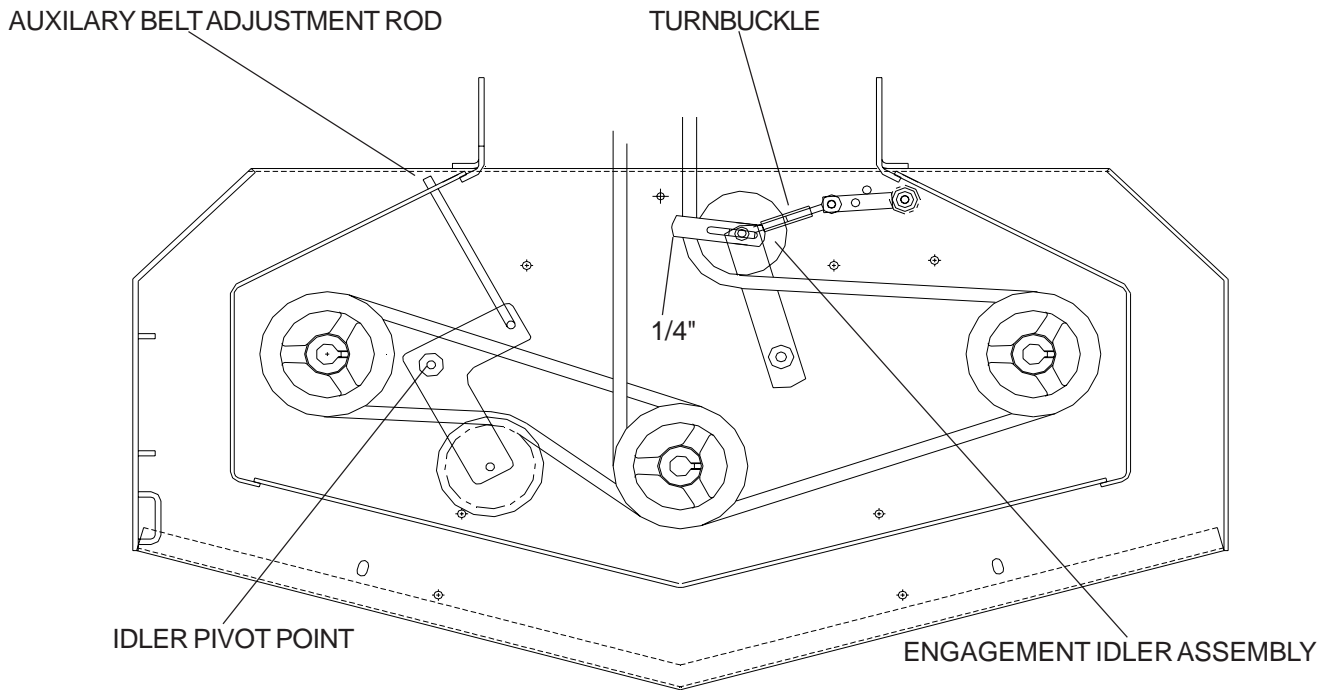


Figure 6

## BEFORE OPERATING

Be thoroughly familiar with all controls and how to use them before operating the mower. Know beforehand how to stop the engine, drive wheels, and mower blades in preparation for possible emergency.

## EMERGENCY STOP

Pull both drive levers firmly against handle grips and hold them securely in place. Use thumbs to lift the neutral bail up into the neutral slot. Then stop engine by pulling throttle control back and shut off the key switch. See figure # 7.

## NORMAL OPERATING STOP

1. Pull both drive levers firmly toward the handle grips to stop forward motion.
2. Use thumbs to lift neutral bail into the neutral slots.
3. Move the throttle control to the slow position.
4. Move blade engagement lever to the off position.
5. Move shift lever to the neutral position.
6. Stop engine by turning the key switch to the off position.

**NOTE**  
CLOSE FUEL VALVE AT THE END OF  
EACH MOWING JOB !!

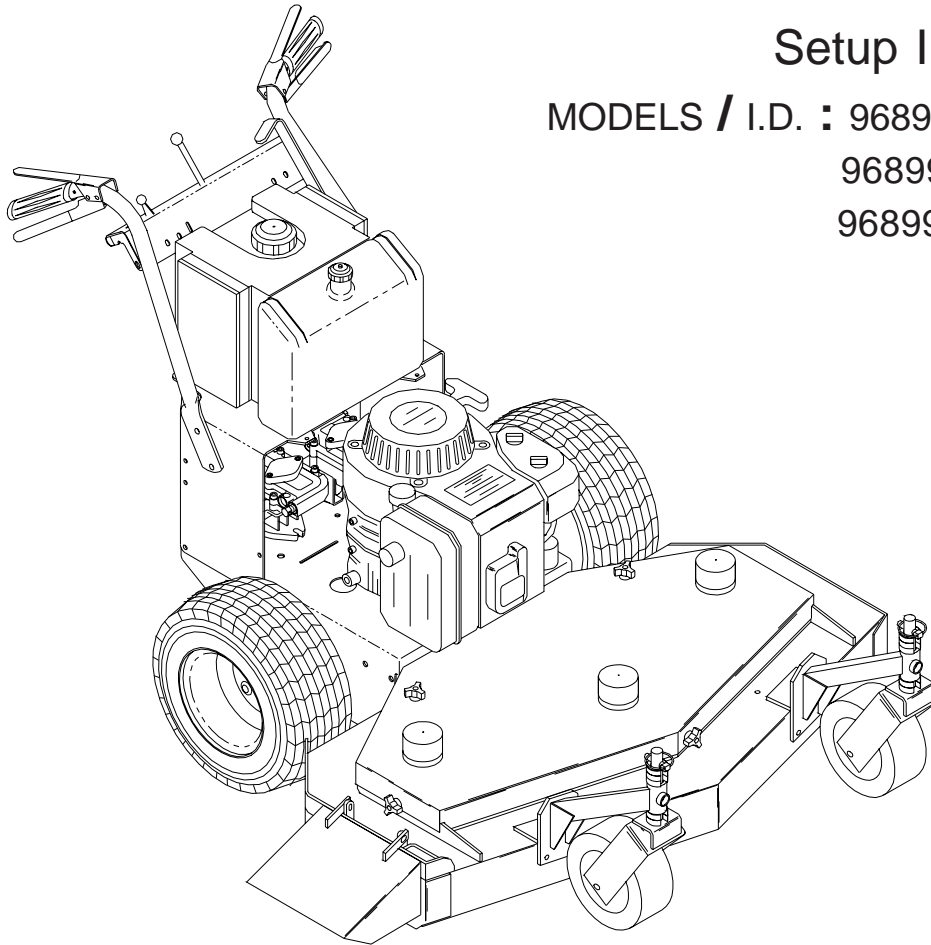
## PRE-START CHECKLIST

Make the following checks and perform the services as required before each start up.

1. If required make cutting height adjustments and drive linkage adjustments. Refer to pages 6, 7, and 8
2. Check tires for proper inflation (front caster tire pressure to be 50 lbs max. / rear tire pressure to be 14 lbs max.
3. Check guards, deflectors, and covers to make sure all are in place and secure.
4. Check blade belts for wear and correct tension if worn or damaged, replace with original part.
5. Clean interior and exterior surfaces of the cutting deck and clean engine of any accumulation of dirt or debris. Keep engine air intake clear at all times.
6. Check engine oil add if needed (do not over-fill)  
refer to engine manual for oil specs.
7. Add fuel to tank after pushing the mower outside where fumes can dissipate. Make sure cap is tight after refueling.

**NOTE**  
DO NOT ADD FUEL WHILE ENGINE  
IS RUNNING OR WHILE ENGINE IS HOT.

## Hydro Intermediate Walk Behind



Setup Instructions for:

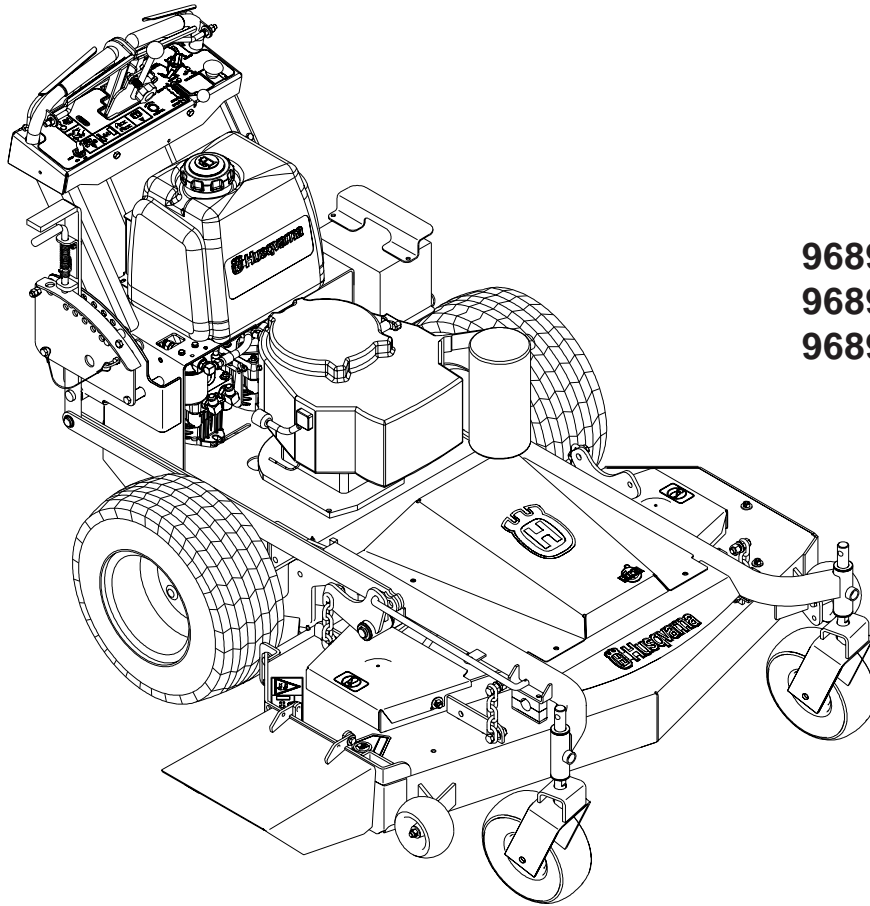
MODELS / I.D. : 968999105 / WH3614A

968999111 / WH3615A

968999106 / WH4817A

### EQUIPMENT SETUP

1. Uncrate mower
2. Mount front caster assemblies to the front deck using the fasteners provided on the deck (both sides).
3. Cut the plastic wire ties holding the operator presence levers down.
4. Check tire pressure in all four tires. (rear tires 15 PSI, front tires 20-25 PSI)
5. Check engine oil with dipstick. Add if needed per engine manufactures specifications. (See engine manual)
6. Check hydraulic oil level. Should be an 1.0" below the bottom of the fill tube.
7. Mount the discharge chute to the front deck using the fasteners provided on the deck.



## Models:

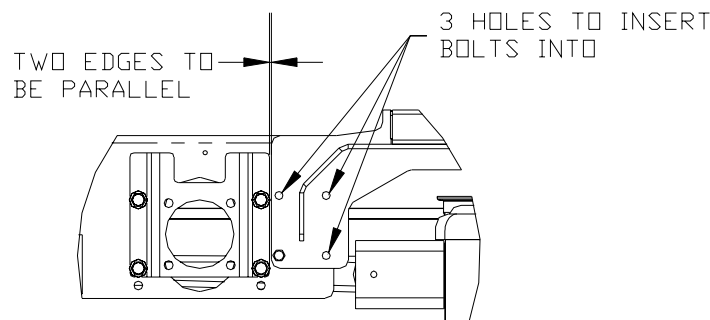
968999127 / WHF4215ETS

968999129 / WHF4818ETS

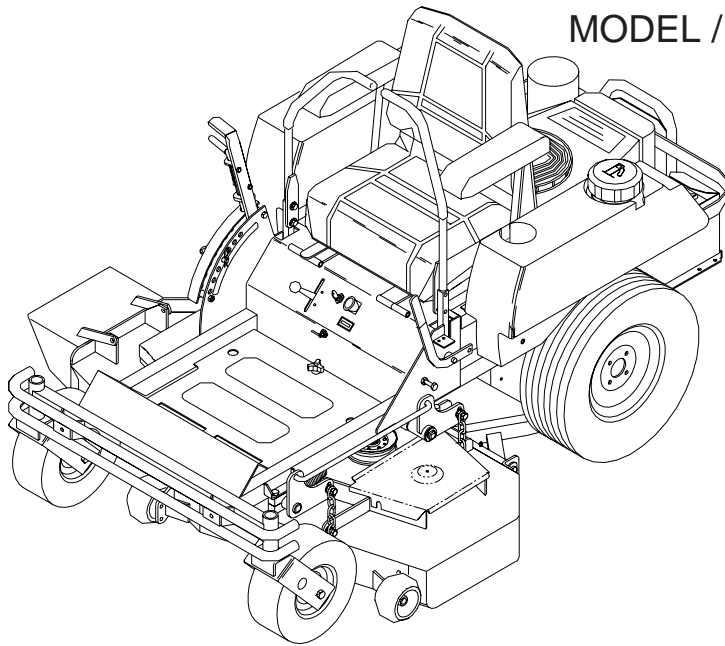
968999130 / WHF5218ETS

### EQUIPMENT SETUP AND ADJUSTMENTS

1. Uncrate mower
2. Lift up on handles until mower is level.
3. Using the hardware provided in the literature package, insert 3 bolts per side into the frame side where the front frame connects to the rear deck. (See FIG 1) A pry bar can be used to align the holes.
4. Line up the back edge of the front frame with the front edge of the wheel motor mount so they are parallel and tighten the hardware.
5. Remove the hood from the frame and install the deck belt. Be sure the belt is still wrapped around the clutch pulley under the rear deck. (See FIG 3)
6. With the hood off, mount the muffler on the engine using the provided hardware. Reinstall hood.
7. Cut the plastic wire ties holding the operator presence levers down.
8. Check tire pressure in all four tires. (rear tires 15 PSI, front tires 20-25 PSI)
9. Check engine oil with dipstick. Add if needed per engine manufactures specifications. (See engine manual)
10. Check hydraulic oil level. Should be an 1.0" below the bottom of the fill tube.
11. Mount the discharge chute to the front deck using the fasteners provided on the deck.



## Mid Mount Zero Turn Riders 42" & 48"



Setup Instructions for:  
MODEL / I.D. : 968999157 / ZTHKH4818A  
968999158 / ZTHKH4820A  
968999167 / ZTHKW4218A  
968999168 / ZTHKW4818A  
968999169 / ZTHKW4821A

### EQUIPMENT SETUP

1. Uncrate mower.
2. Mount drive wheels using the four lug nuts installed on the hub.
3. Check tire pressure in all four tires. Pressure for all four tires is 15 psi.
4. Remove the motion control levers and install on the inside of the control arms (See figure 1). Align the levers so they are even in the neutral position. (See figure 6)
5. Install seat lanyard to the seat frame with 5/16" hardware. Seat lanyard is located under the seat in the hydraulic pump area. Attach the lanyard to the left front seat stud on the seat frame.
6. Check engine oil with dip stick. Add if needed per engine manufactures specifications. (See Kawasaki engine manual for engine specifications.)
7. Loosen the discharge chute slightly and lower into position. Chute should be snug but still pivot freely.

Figure 1

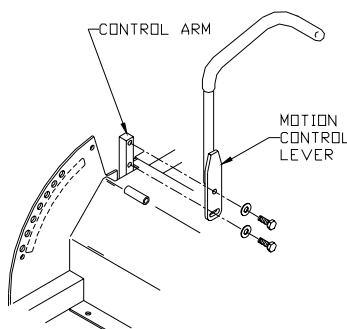
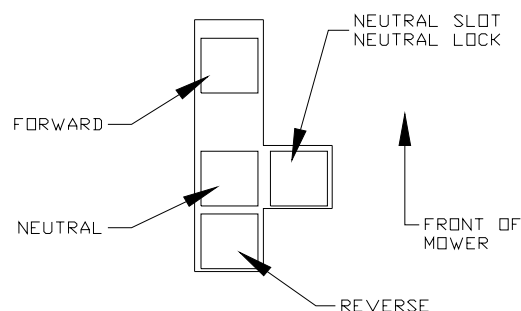
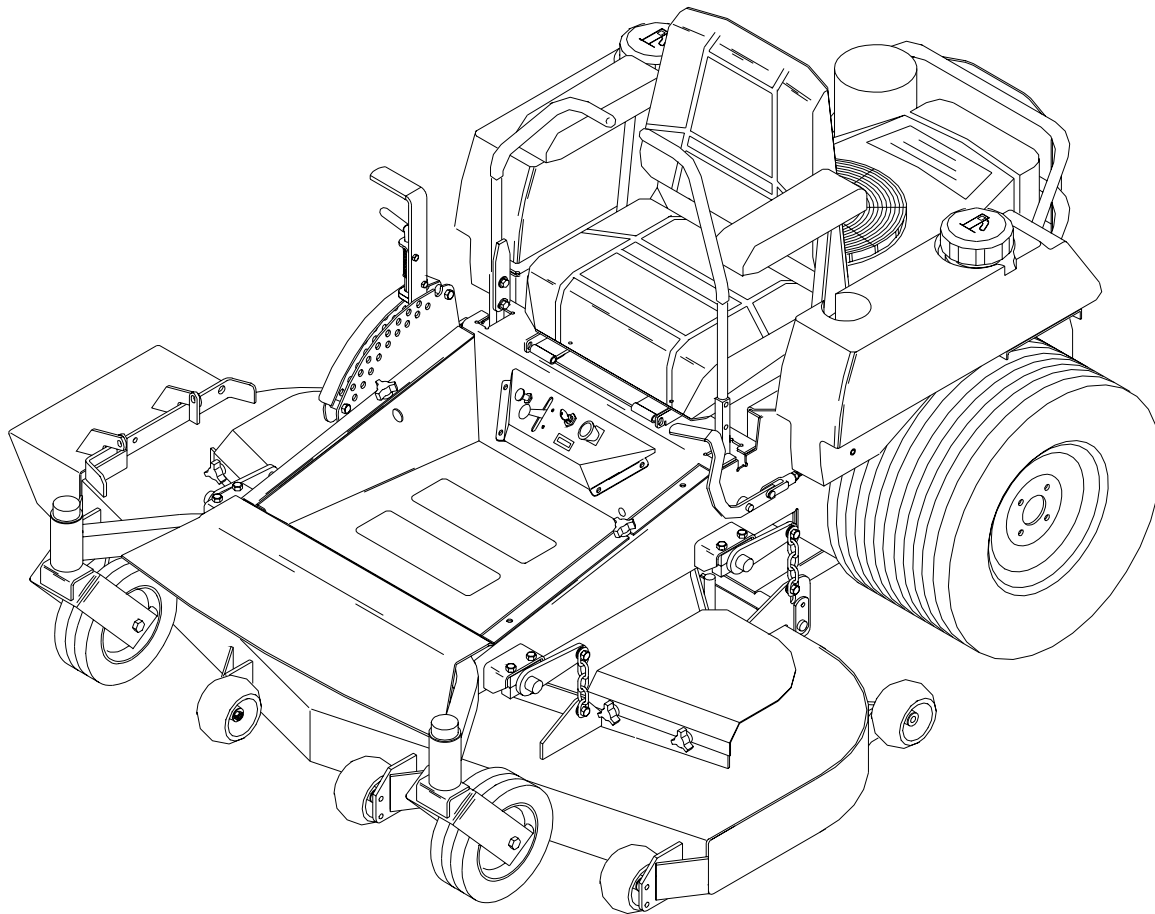


Figure 6



15

## Mid Mount Zero Turn Riders 52" & 61" Generation 2



### Setup instructions for:

#### Models:

968999159 / ZTH5221KAA  
968999160 / ZTH5223KAA  
968999161 / ZTH5223KOA  
968999162 / ZTH5223KOLA  
968999163 / ZTH5225KOA  
968999165 / ZTH6125KOA  
968999166 / ZTH6125KAA  
968999173 / ZTH5225KAA



## Setup

Uncrate machine.

Mount rear drive wheels using the lug nuts installed on the hubs.

Check the tire pressure in all four tires. All tires should be 15 psi.

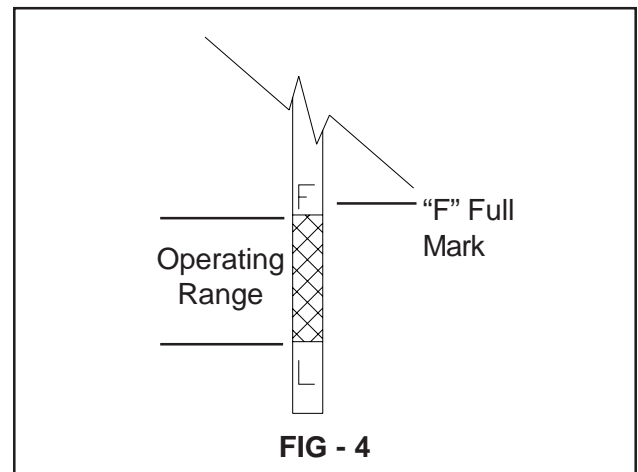
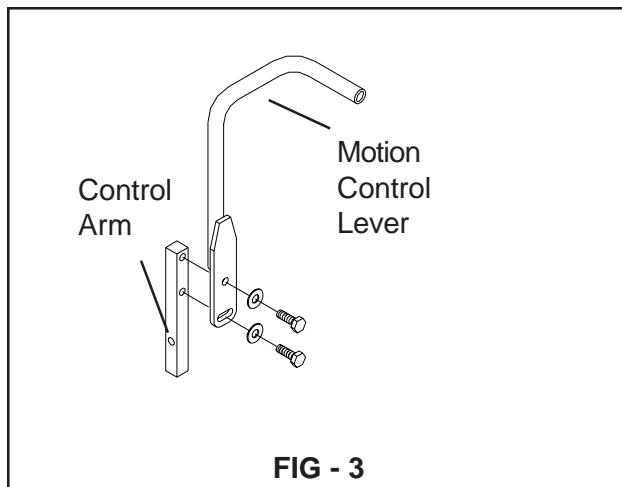
Remove top bolt in control arm and loosen bottom bolt, rotate the control levers to the upright position. Align the levers so they are even in the neutral position. Reinstall hardware and tighten. FIG - 3

Install seat rod to the seat frame with cotter pin in plastic bag. Seat rod is located under the seat in the hydraulic pump area.

Check engine oil with dip stick. Add if needed per the engine manufactures specifications. See engine manual for oil type and filling specifications. FIG - 4

Loosen the discharge chute slightly and lower into position. Chute should be snug but still pivot freely.

Install armrests to seat. Hardware and armrests are in the plastic bag.



For Husqvarna Parts Call 606-678-9623 or 606-561-4983

