BUNTON®

SETUP, PARTS & MAINTENANCE MANUAL GEAR DRIVE MIDSIZE

Power Unit Models:
630024 POWER UNIT-15HP KAWASAKI GD
630025 POWER UNIT-17HP KAWASAKI GD
(Operation & Safety Manual: 4119600)

WARNING: If incorrectly used this machine can cause severe injury. Those who use and maintain this machine should be trained in its proper use, warned of its dangers and should read the entire manual before attempting to set up, operate, adjust or service the machine.

JACOBSEN
A Textron Company

4119601 REV B

CALIFORNIA
Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

Californie Proposition 65
Avertissement

Les échappements des moteurs diesel et certains de leurs composés sont reconnus par l'Etat de Californie pour être cancérigènes, provoquer des défauts congénitaux et d'autres dangers en matière de reproduction.

California Advertencia
de la Proposicion 65

El estado de California hace saber que los gases de escape de los motores diesel y algunos de sus componentes producen cáncer, defectos de nacimiento y otros daños en el proceso de reproducción humana.

⚠ WARNING

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

⚠ AVERTISSEMENT

L'émission du moteur de ce matériel contient des produits chimiques que l'Etat de Californie considère être cancérigènes, provoquer des défauts congénitaux et d'autres dangers en matière de reproduction.

⚠ ADVERTENCIA

El estado de California hace saber que los gases de escape de este producto contienen productos quÍmicos que producen cáncer, defectos de nacimiento y otros daños en el proceso de reproducción humana.

Gear Drive Midsize

IMPORTANT MESSAGE

Thank you for purchasing this Bunton product. You have purchased a world class mowing product, one of the best designed and built anywhere.

This machine comes with an Operation and Safety Manual and a separate Setup, Parts and Maintenance Manual. The useful life and good service you receive from this machine depends to a large extent on how well you read and understand these manuals. Treat your machine properly, lubricate and adjust it as instructed, and it will give you many years of reliable service.

Your safe use of this Bunton product is one of our prime design objectives. Many safety features are built in, but we also rely on your good sense and care to achieve accident-free operation. For best protection, study the manuals thoroughly. Learn the proper operation of all controls. Observe all safety precautions. Follow all instructions and warnings completely. Do not remove or defeat any safety features. Make sure those who operate this machine are as well informed and careful in its use as you are.

See a Bunton dealer for any service or parts needed. Bunton service ensures that you continue to receive the best results possible from Bunton's products. You can trust Bunton replacement parts because they are manufactured with the same high precision and quality as the original parts.

Bunton designs and builds its equipment to serve many years in a safe and productive manner. For longest life, use this machine only as directed in the manuals, keep it in good repair and follow safety warnings and instructions. You'll always be glad you did.

Jacobsen, a Textron Company
One Bob Cat Lane
Johnson Creek, WI 53038-0469

TABLE OF CONTENTS ..... FIGURES ..... PAGE

NOTICE!!!

Unauthorized modifications may present **extreme** safety hazards to operators and bystanders and could also result in product damage.

Jacobsen, a Textron Company strongly warns against, rejects and disclaims any modifications, add-on accessories or product alterations that are not designed, developed, tested and approved by Jacobsen, a Textron Company Engineering Department. Any Jacobsen, a Textron Company product that is altered, modified or changed in any manner not specifically authorized after original manufacture-including the addition of “after-market” accessories or component parts not specifically approved by Jacobsen, a Textron Company-will result in the Jacobsen, a Textron Company Warranty being voided.

Any and all liability for personal injury and/or property damage caused by any unauthorized modifications, add-on accessories or products not approved by Jacobsen, a Textron Company will be considered the responsibility of the individual(s) or company designing and/or making such changes. Jacobsen, a Textron Company will vigorously pursue full indemnification and costs from any party responsible for such unauthorized post-manufacture modifications and/or accessories should personal injury and/or property damage result.

This symbol means:
ATTENTION!
BECOME ALERT!

Your safety and the safety of others is involved.

Signal word definitions:

The signal words below are used to identify levels of hazard seriousness. These words appear in this manual and on the safety labels attached to Jacobsen, a Textron Company machines. For your safety and the safety of others, read and follow the information given with these signal words and/or the symbol shown above.

⚠DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.

⚠WARNING

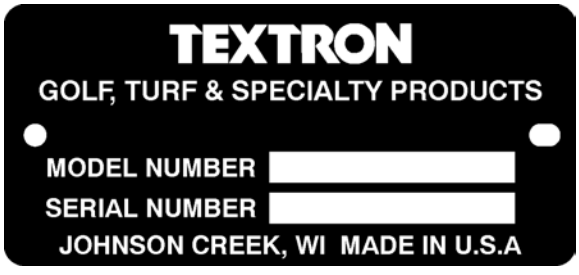
WARNING indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

⚠CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices or property damage.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, **MAY** result in property damage.



MODEL NUMBER: This number appears on sales literature, technical manuals and price lists.

SERIAL NUMBER: This number appears only on your mower. It contains the model number followed consecutively by the serial number. Use this number when ordering parts or seeking warranty information.

GENERAL NOTE: FRONT, REAR, RIGHT HAND AND LEFT HAND REFERENCES BELOW ARE WITH RESPECT TO AN OPERATOR AT THE CONTROLS.

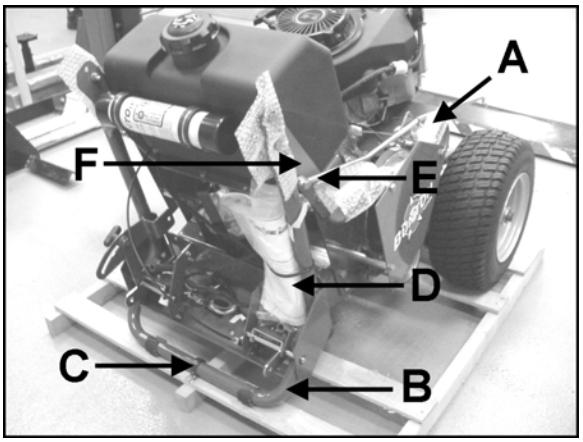
1. UNCRATE - Place both power unit and cutterdeck crates on a level surface. Remove sides and top from both the power unit and cutterdeck crates.

2. Remove gear selector handle **A** from the power unit and set aside for later use.

3. Remove P-Clip **C** from crate and upper handle **B**.

4. Remove parts bag **D** from lower handle **B** and set aside for later use.

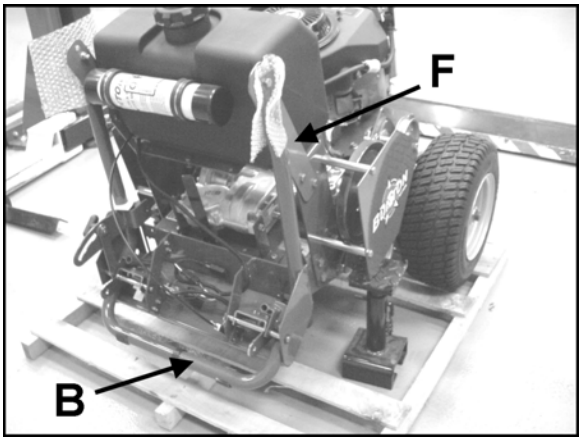
5. Remove traction rod **E** from shipping bracket **F** on both sides of the power unit and set aside for later use.



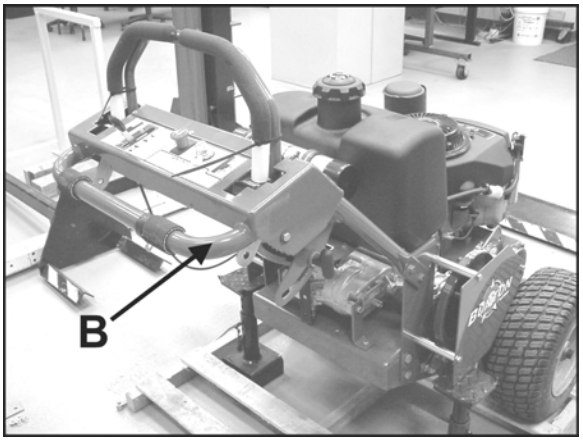
6. Support power unit, using jack stands as shown.

7. Remove upper handle **B** from shipping bracket **F**.

NOTE: Retain hardware from Step 7 for later use and discard shipping brackets.

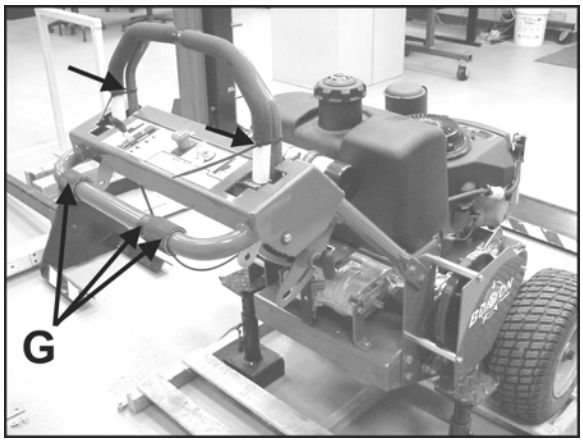


8. Attach upper handle **B** to the lower handle using the 3/8”-16X1 bolts and 3/8”-16 nuts removed in Step 7 as shown.



9. Remove and discard the shipping sleeves **G**.

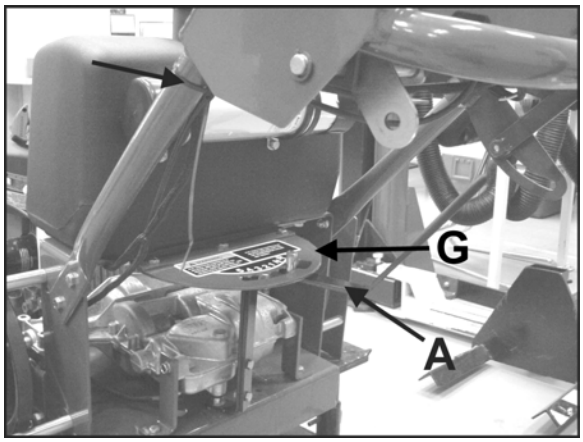
10. Remove and discard tie wraps at locations shown.



11. Wire tie harness and throttle cable to upper handle as shown.

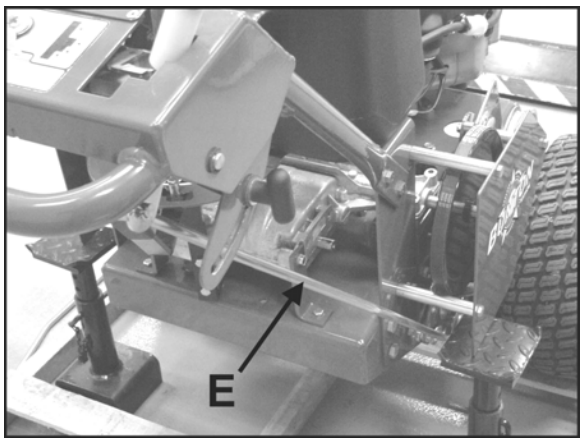
12. Attach gear select plate **G** to bottom of the select support, using (2) 5/16-18X3/4 bolts and (2) 5/16-18 nuts supplied in parts bag.

13. Attach gear shift lever **A** removed in Step 2 to the lower shift arm with (2) M8-1.25 X 20 Bolts and (2) M8-1.25 whizlock nuts as shown. Shift the lever to the neutral position and verify that the lever is centered side to side in the neutral position. If not, loosen the M8 bolts and reposition gear shift lever **A**. Retighten bolts.



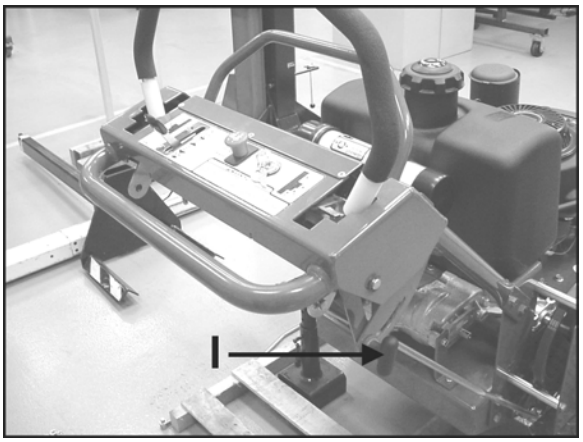
14. Install traction rod **E**, set aside in Step 5 on both sides of the power unit as shown.

NOTE: Swivels should point outward at the upper handle with the rod on the inside of the control bracket.



15. Move the speed control knob **I** to the forward position as shown.

NOTE: To remove the power unit from the crate, make sure the gear selector handle is in the neutral position. Push or pull the control levers in the desired direction of travel. Moving the control levers will release the parking brakes.



16. Attach cutterdeck per the instructions on the following pages then return to Step 15 of this section.

17. Fill engine with oil. (See engine manual for specifications.)

18. Fill fuel tank with with clean, fresh unleaded fuel.

⚠ WARNING GASOLINE IS HIGHLY FLAMMABLE!

- Fill fuel tank with good quality, clean, regular unleaded gasoline.
- Do not use hi-test fuel.
- Do not smoke.
- Do not spill fuel.
- Fill outdoors.
- Do not overfill. Fill to 1" below bottom of filler neck to allow room for expansion.
- USE A FUNNEL TO FILL GAS TANK

19. Adjust tire pressure in drive wheels and casters to 14 psi (1 kg/cm^2).

20. Before attempting to start the mower, read and understand all sections of the Operation & Safety manual.

NOTICE: Special setup instructions.

- Before engaging the cutterdeck, run the engine for five minutes at full RPM. This is recommended for new engine installation to permit complete engine lubrication prior to load.

- Do not engage the cutterdeck at full throttle. Set the throttle half way between the highest and lowest engine speed, engage the PTO switch and increase the engine speed to full before cutting.

- **⚠ WARNING**
  Do not use this machine without an approved grasscatcher, grass discharge chute or mulching plate(s) correctly fitted.

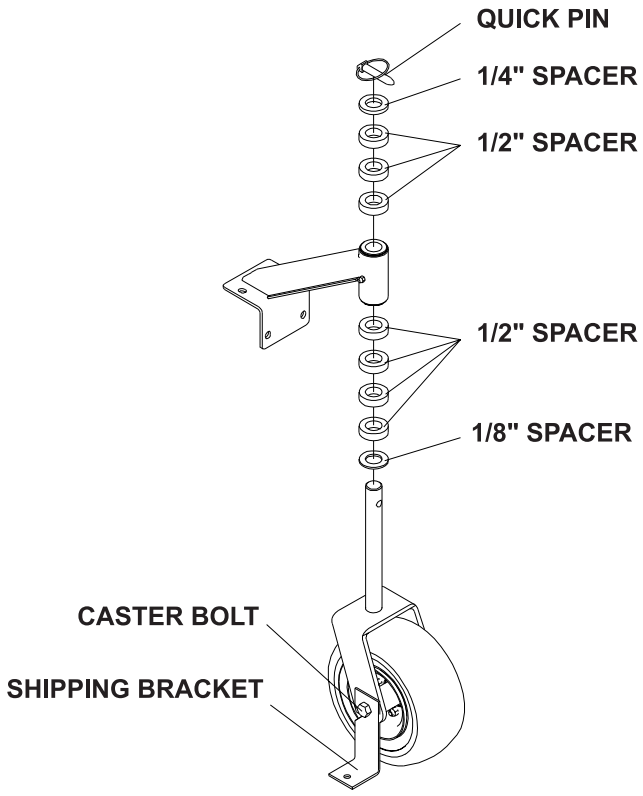
CUTTERDECK ATTACHMENT: Two types of cutterdeck mounting systems are available, fixed and floating. Fixed mounting rigidly attaches the cutterdeck to the power unit. Floating mounting allows the cutterdeck to move independent of the power unit providing a more uniform cut. Follow the appropriate instructions below for the type of cutterdeck being attached to the power unit.

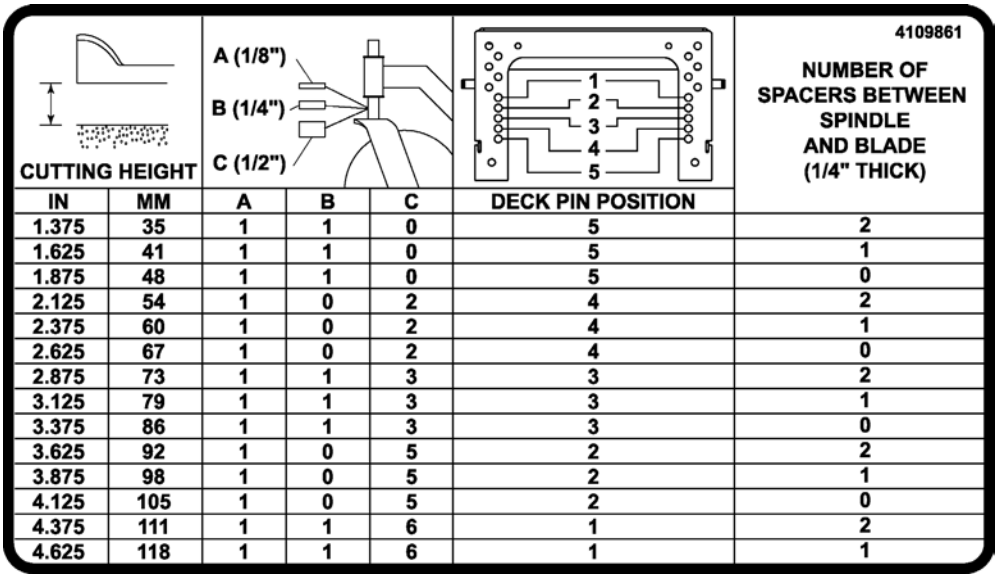
FIXED CUTTERDECK ATTACHMENT

1. Remove the cutterdeck from the crate.
2. Unbolt the caster wheels and the shipping brackets from the crate.
3. Remove the shipping bracket from the caster wheel by loosening the caster bolt and sliding the shipping bracket off and retighten caster bolt.
4. Remove quick pin and remove the appropriate number of spacers for the desired height of cut. See height of cut chart below.

NOTE: Height of cut chart is also located on bottom of belt cover or in the Operation & Safety Manual.

5. Repeat for other caster wheel assembly.



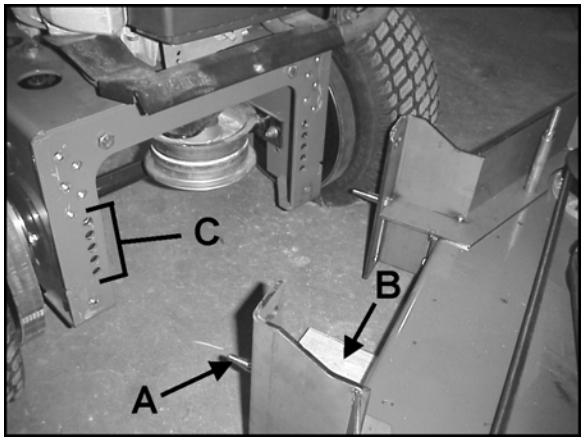


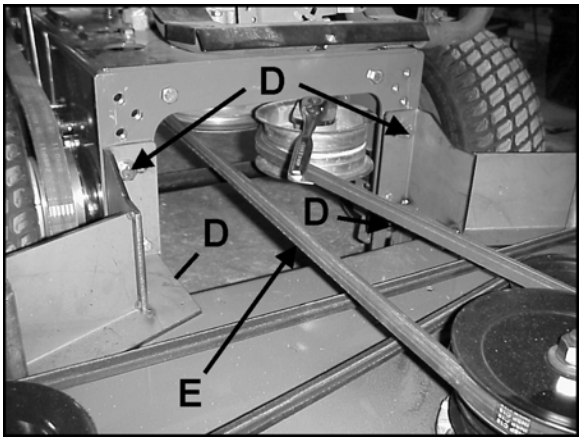
IN	MM	A	B	C	DECK PIN POSITION	NUMBER OF SPACERS BETWEEN SPINDLE AND BLADE (1/4" THICK)
1.375	35	1	1	0	5	2
1.625	41	1	1	0	5	1
1.875	48	1	1	0	5	0
2.125	54	1	0	2	4	2
2.375	60	1	0	2	4	1
2.625	67	1	0	2	4	0
2.875	73	1	1	3	3	2
3.125	79	1	1	3	3	1
3.375	86	1	1	3	3	0
3.625	92	1	0	5	2	2
3.875	98	1	0	5	2	1
4.125	105	1	0	5	2	0
4.375	111	1	1	6	1	2
4.625	118	1	1	6	1	1

6. Remove belt cover and set aside.

7. Block the rear of the cutterdeck with the appropriate height block for the desired height of cut **B**. See Support Block Chart below.

CUTTING HEIGHT	HOLE POSITION ON ENGINE DECK*	BLOCK HEIGHT AT REAR OF DECK (B)
1.375" - 1.625"	5	1.25"
1.875" - 2.375"	4	2.00"
2.625" - 3.125"	3	2.75"
3.375" - 3.875"	2	3.50"
4.125" - 4.625"	1	4.25"
* Position 1 is the highest hole on the engine deck.		





8. Position the power unit behind the cutterdeck.

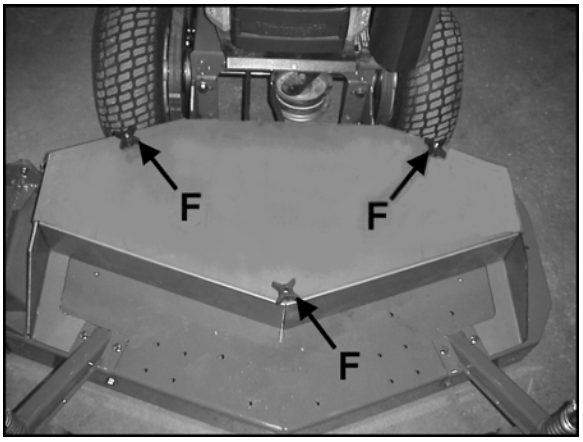
9. Move the power unit towards the cutterdeck until the guide pins **A** engage the appropriate hole **C** on the power unit for the desired height of cut. Fasten with (4) M12-1.75 X 30 bolts at **D**.

10. Loop the PTO belt **E** around the electric clutch pulley. Using a 3/8" ratchet wrench or 3/8" breaker bar rotate the PTO belt idler while looping the PTO belt around the cutterdeck pulley.

11. Reinstall belt cover and fasten in place with knobs **F**.

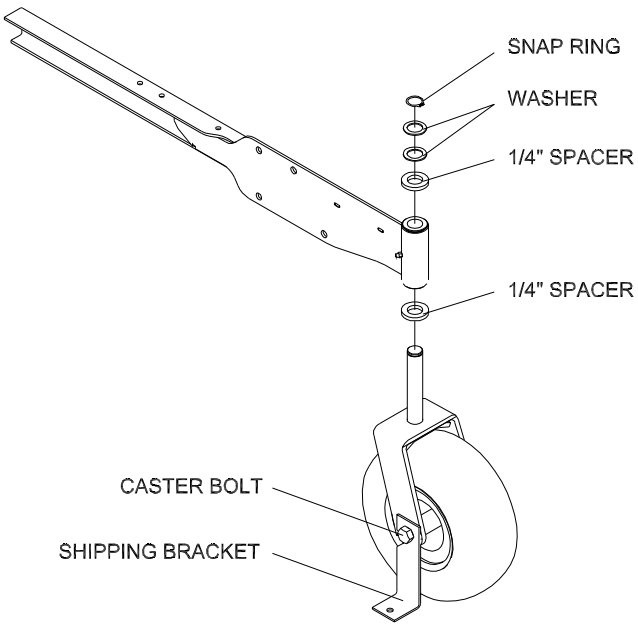
12. Remove support block from the rear of cutterdeck.

13. Remove support from the rear of the power unit.

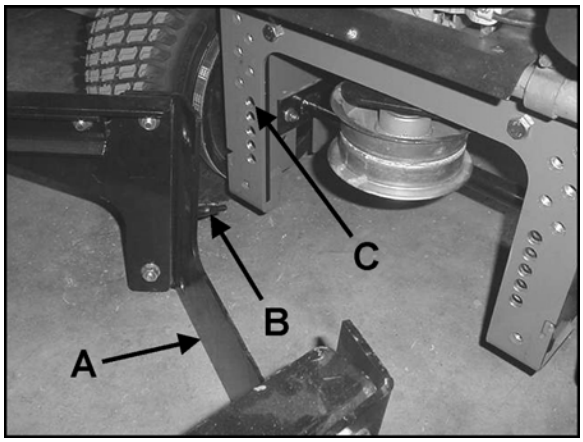


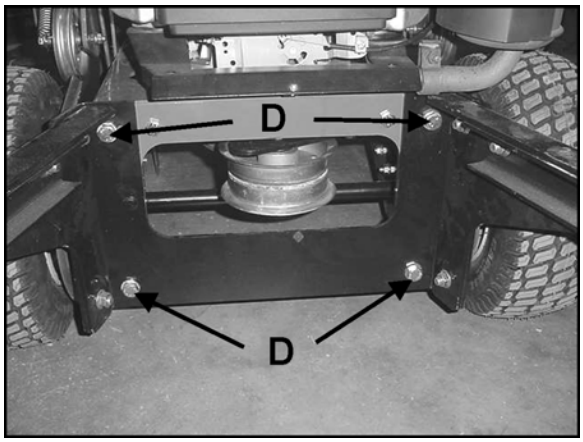
FLOATING CUTTERDECK ATTACHMENT

1. Unbolt the caster wheels and the shipping brackets from the crate.
2. Remove the shipping bracket from the caster wheel by loosening the caster bolt and sliding the shipping bracket off and retighten caster bolt.
3. Remove snap ring, (2) washers and (1) 1/4" spacer from one caster wheel assembly.
4. Insert caster yoke through cradle bushing from the bottom up and place (2) washers and (1) 1/4" spacer removed in Step 3 back onto the shaft above the cradle bushing and secure using the snap ring removed in Step 3 as shown.
5. Repeat for other caster wheel assembly.



6. Remove belt cover from cutterdeck cradle.
7. Remove the cutterdeck cradle **A** from the crate and insert guide pins **B** into top hole **C** in power unit.
8. Attach cutterdeck cradle to power unit using (4) M12-1.75 X 35 bolts at **D** and tighten securely.
9. Remove support from rear of power unit.





10. Position power unit behind the crate and cutterdeck.

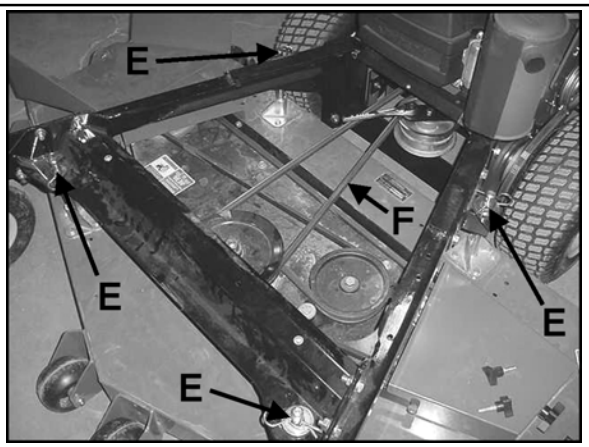
11. With the cradle raised above the cutterdeck, roll the front of the cradle and power unit up and over the cutterdeck and crate.

12. Align height of cut pins **E** on cutterdeck with the bushings on the cradle and lower the cradle so pins pass through bushings.

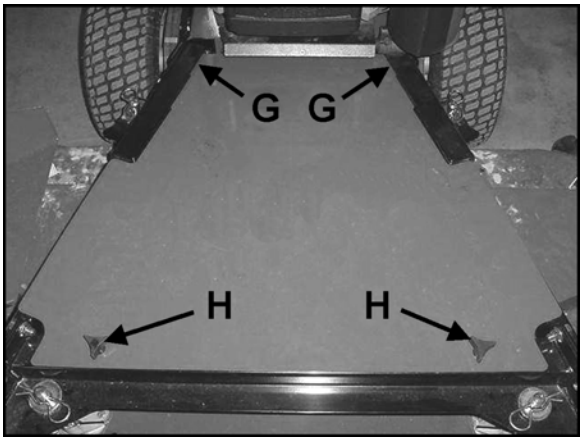
13. Install washers and hairpins through the height of cut pins at the appropriate hole for the desired height of cut.

NOTE: Height of cut chart is located on each side of the cutterdeck or in the Operation & Safety Manual.

14. Loop the PTO belt **F** around the electric clutch pulley. Using a 3/8" ratchet wrench or 3/8" breaker bar rotate the PTO belt idler while looping the PTO belt around the cutterdeck pulley.

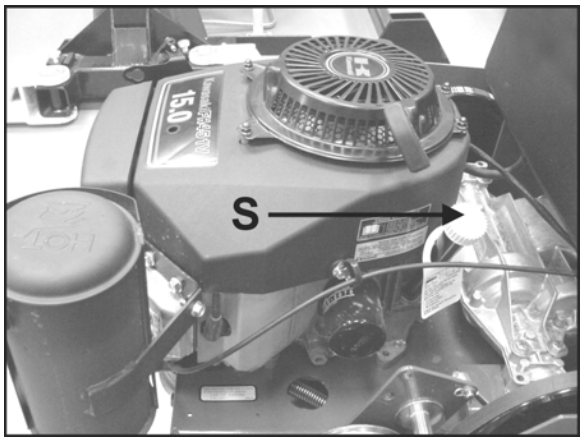


15. Install belt cover by inserting tabs at the rear of the belt cover underneath the side rails at **G** and fasten with knobs **H**.

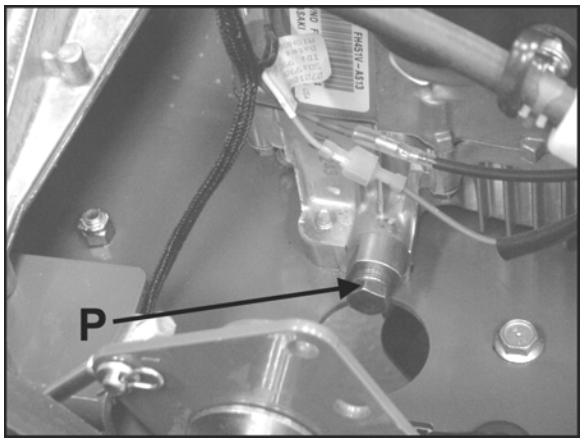


ENGINE

DAILY
Remove the dipstick **S** and check that the oil level reaches the full mark. If necessary, top off with fresh oil. To obtain the correct oil level, the machine must be level. See engine manufacturer's manual for proper oil viscosity and grade.
DO NOT OVER FILL!



AFTER THE FIRST 5 WORKING HOURS
While the engine is warm, remove the drain plug **P** and drain the crankcase. Replace oil filter. Clean and replace the plug. Fill the crankcase through the filler hole with fresh oil to the full mark. See engine manufacturers manuals for oil and filter change intervals.

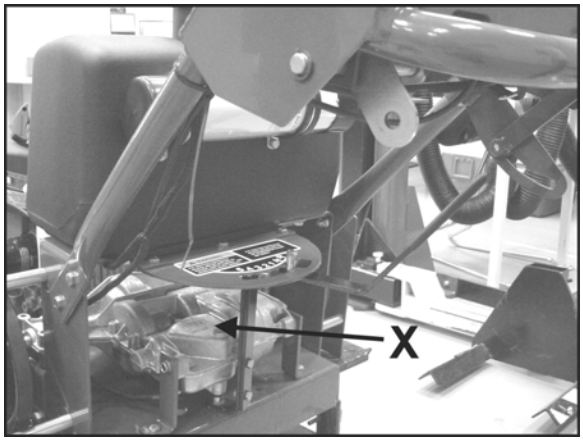


Engine operator's manuals are shipped with each machine. Shop manuals for the engines are available from your local engine dealer.

- For Kawasaki FH500V, order: 99920-2129-03.
- For Kawasaki FH451V, order: 99920-2129-03.

GEARBOX

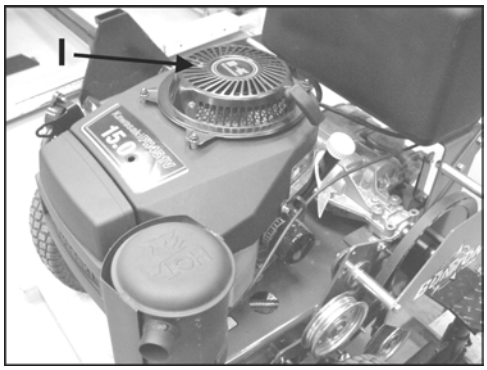
Transmission **X** is sealed for life from the factory and should require no maintenance. See the parts breakdown in this manual for service parts and how to contact the Dana Transmission Service Department.



The maintenance schedule detailed is for average operating conditions. Under extreme conditions (dusty, dirty or more than 8 hrs continuous use) maintain more frequently.

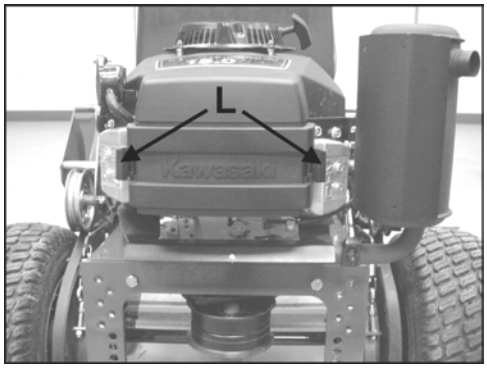
Engine (daily)
Check the engine for oil leaks.

Cooling Fins and **Air Intake screen (daily)**
Ensure that the cooling fins and air intake screen **I** are cleaned daily. Continued operation with a clogged cooling system will cause severe overheating and result in engine damage.



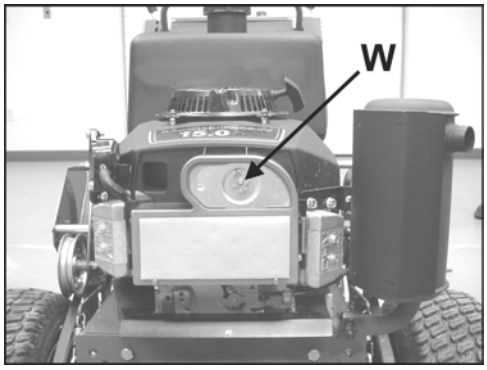
Air Cleaner (every 25 hours)
Service more frequently if operating in very dusty or dry conditions. Extensive damage will result from operating with a dirty air cleaner.

1. Remove the air cleaner cover by releasing latches **L**.
2. Remove the foam precleaner by sliding it off the paper cartridge. Wash in kerosene or detergent and water. Dry thoroughly. Saturate in engine oil. Squeeze to remove excess oil.
3. Reinstall all parts.



NOTES:

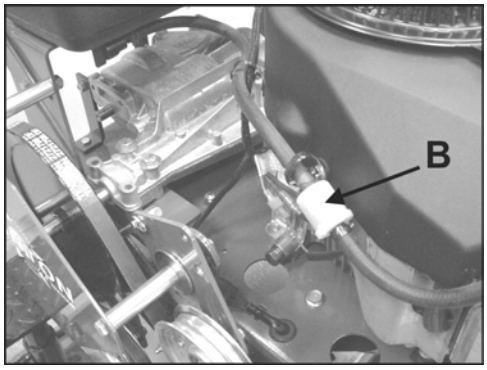
- Every 50 hours remove the paper element by loosening wing nut **W**. If dirty, replace.
- DO NOT use petroleum solvents to clean the paper element. They may cause it to deteriorate.
- DO NOT use pressurized air to clean or dry element.
- See the Setup, Parts & Maintenance manual for service part numbers.



In-Line Fuel Filter
When required, the fuel filter **B** may be replaced. See the Setup, Parts & Maintenance manual for service part numbers.

Tires
Tire pressures should be maintained at 14 psi.

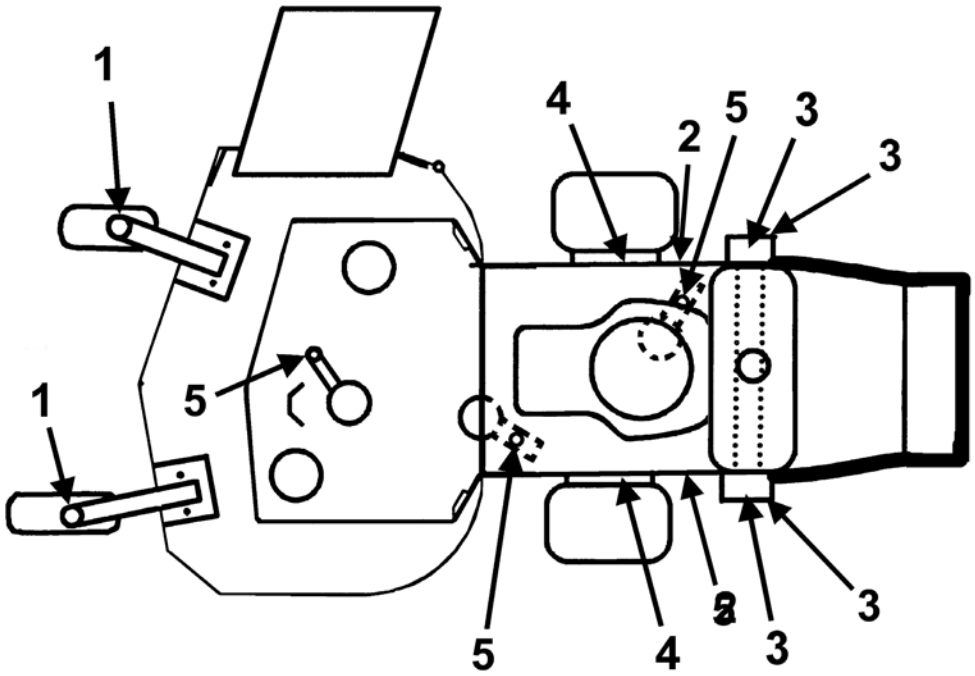
NOTE: Adjusting tire pressure between 10 psi and 28 psi can improve tracking. Increase pressure on the side the machine tracks toward and decrease it on the other side.



MACHINE LUBRICATION

Every 50 Working Hours - Lubricate the following points with grease:

1) Caster wheel pivots (2 points)
2) Brake Control Lever (2 points)
3) Drive Belt Bellcranks (4 points)
4) Brake Levers (2 points)
5) Idler pivot bearings:
   a) Engine to cutterdeck belt tensioner
   b) Cutterdeck belt tensioner
   c) Transmission drive belt tensioner

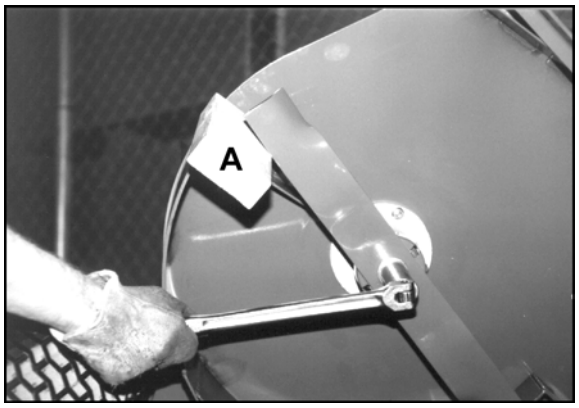


Blade Sharpening

Blades may be sharpened by filing or grinding, but with either method the balance of the blades must be maintained at 5/8 oz/in or less. Failure to maintain balance causes excess vibration, wear and shortened life of not only the blades, but most all components of the machine. To balance a blade after sharpening: attach 1/8 oz of weight 5" from center on the light end. This should make the light end the heavy end. If it does not: File or grind the heavy end until the addition of weight makes the light end the heavy end.

NOTE:

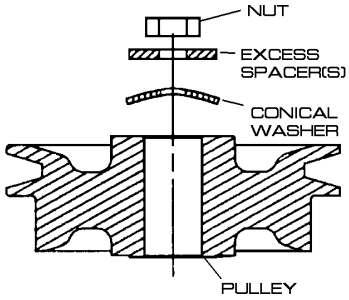
- Do not overheat or weaken the blades.
- Do not straighten bent blades. Replace with new Bunton blades.
  If lift portion of blade is worn thin replace with a new Bunton blade.
- Replace cracked or bent blades.
- **ALWAYS** replace with Bunton blades—do not use another manufacturer's blades as this could be dangerous.



BLADE REMOVAL

NOTE: To prevent blade from turning, place block of wood at **A**, with grain perpendicular to blade. Follow these instructions to prevent injury when bolt releases.

1. Use a box wrench or socket with a long breaker bar to remove spindle bolt under cutterdeck.
2. Slip tube over breaker bar or wrench if necessary to gain leverage.
3. Keep hands clear as blades may rotate when bolt releases.
4. When changing blades, wear thickly padded gloves.
5. Block blades from turning by using a piece of wood.



Cutterdeck Pulley Assembly

BLADE RE-INSTALLATION

1. Place the desired number of spacers (no more than 2) on the spindle bolt below the cutterdeck between the blade and spindle shaft.
2. Insert the cutter spindle bolt (from bottom) complete with washer, blade and spacers.
3. Place remaining spacer(s) on the spindle bolt above the cutterdeck between the conical washer and nut (as shown). Replace nut and tighten to 70 ft-lbs.

SPARK PLUG

- Remove plug and check condition.
- Good operating conditions are indicated if the plug has a light grey or tan deposit. A white blistered coating may indicate overheating. A black coating usually means an "over rich" fuel mixture caused by a clogged air cleaner or improper carburetor adjustment. Do not sandblast, wire brush or otherwise try to clean a dirty plug. Best results are obtained with a new plug.
- See engine manufacturers manual for proper spark plug gap.

NOTE: CHANGE ENGINE OIL AND FILTER AFTER FIRST 5 HOURS OF OPERATION.

SERVICE OPERATION	FIRST 5 HOURS	DAILY	EVERY 25 HOURS	EVERY 50 HOURS	EVERY 100 HOURS	EVERY 500 HOURS
ENGINE						
Check Oil Level		X				
Check for Oil & Air Leaks		X				
Clean Air Intake		X				
Clean Air Cleaner		X				
Change Oil & Filter*	X	SEE ENGINE MANUFACTURER'S MANUAL*				
Clean Fuel Sediment Bowl				X		
Replace/Adjust Spark Plug	SEE ENGINE MANUFACTURER'S MANUAL					
GEARBOX						
Check Oil Level	MAINTENANCE FREE					
MACHINE						
Check Tire Pressures		X				
Lubricate All Points				X		

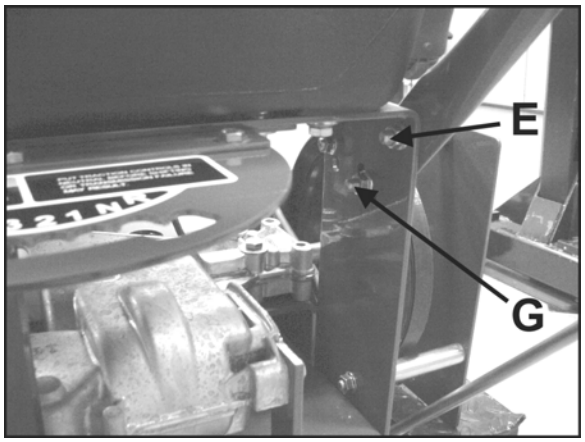
Consult the manufacturer's manual for your engine for further information and instructions.

NOTES

GENERAL	DATE	HRS	DATE	HRS	DATE	HRS	DATE	HRS	DATE	HRS	DATE	HRS
Check tire pressures												
Lubricate all points												
Check nuts & bolts												
ENGINE												
Check oil level												
Change oil												
Clean air cleaner element												
Clean cooling fins												
Replace air cleaner element												
Clean & gap spark plugs												
NOTE: After first 5 hours of operation replace engine oil and filters.												

HANDLE BAR HEIGHT ADJUSTMENT

To adjust handle bar height: Remove bolts **G** and loosen bolts **E** on each side of handlebars. Raise or lower as required. Reposition upper handle and reinsert bolts **G** into appropriate hole in lower handle and tighten. Readjust control rods.



TRACTION BRAKES/PARKING BRAKES - Complete the following steps with the traction rods disconnected from the control lever weldments.

TO ADJUST:

1. The length of the brake spring **F** is set at the factory at 3-1/2" and should not need to be re-adjusted. The length of the spring can be adjusted by loosening the jam-nuts **J** and re-adjusting the spring length.

2. Check the clearance between the bearing **H** and the brake control plate. Rotate the tire 1/4 turn and re-check. Continue until the tire has completed (1) full revolution. Rotate the tire to the position that had the least amount of clearance.

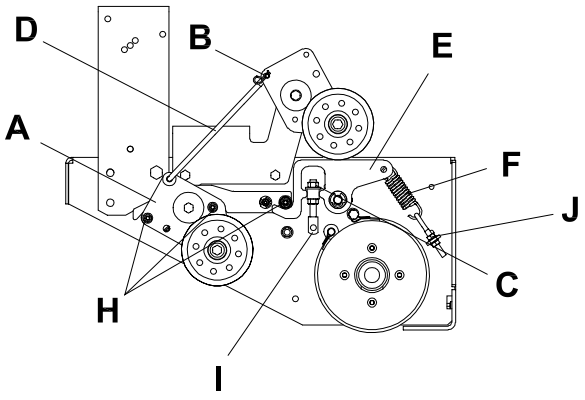
3. Loosen the jam-nuts **C** on the brake pivot **E**. Adjust the length of the brake adjust rod **I** so that there is between 1/16"-1/8" of clearance at the bearing **H** on the lower pivot plate **A** and the brake control plate **G**.

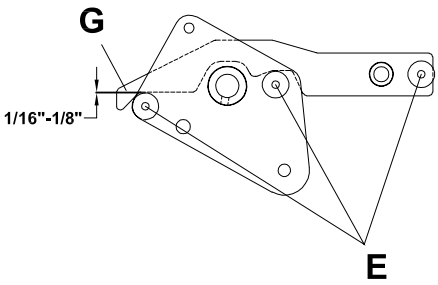
4. Adjust the traction control rod so that the rod is centered in the detent marked **P** in the control panel.

5. Move the control levers through the range of travel and check the clearance at the bearing.

6. Repeat Steps 1-5 for the other side of the machine.

7. Periodically check this adjustment as the brake band wears.

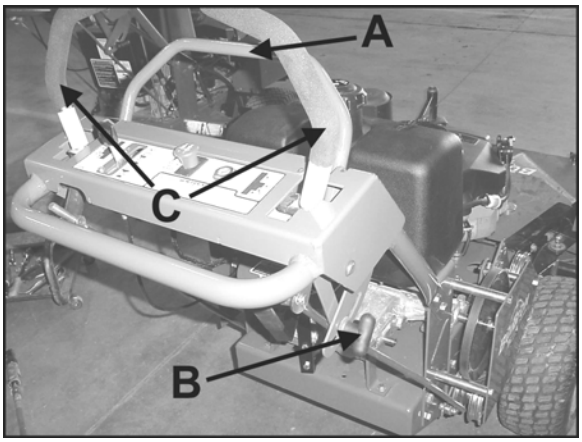




NOTE: The clearance of the bearing to the brake control plate **MUST** be between 1/16"-1/8". Too little clearance will not allow the brakes to fully engage. Too much clearance will make the control levers have too much play. There should be about one inch of travel in the control levers when the bearing clearance is properly set.

DRIVE BELT TENSION ADJUSTMENT

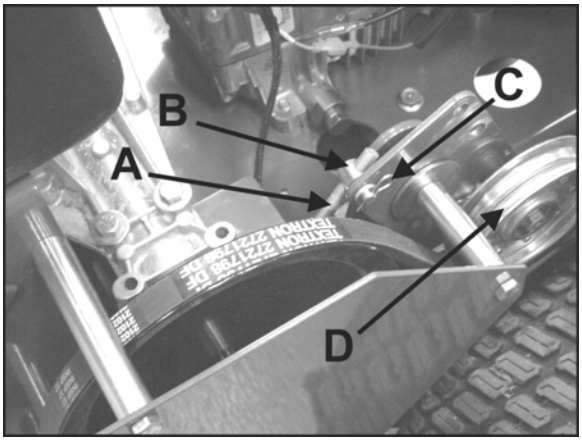
Drive belt tension is adjusted by moving the Stop Bar **A**. Loosen the Speed Control Knob **B** and move the Stop Bar **A** to the desired position. Moving the Stop Bar forward will increase the travel of the Control Levers **C** and provide more belt tension. Moving the Stop Bar **A** back, will decrease the forward travel of the Control Levers **C** and provide less belt tension.



DRIVE BELT ENGAGEMENT ADJUSTMENT

The point at which the drive belt engages can be adjusted by changing the length of the link rod **A**. Remove the cotter pin **C** and turn the swivel **B**. Turning the swivel **B** counter-clockwise will move the drive pulley **D** closer to the belt. This will engage the belt sooner. Turning the swivel **B** clockwise will move the drive pulley **D** further from the belt and engage the belt later.

NOTE: If the drive pulley is adjusted too close to the belt, the operation of the machine can be jerky. This happens because the brakes are still engaged as the belt becomes tensioned. If the drive pulley is adjusted too far away from the belt the operation of the machine will feel spongy. Turn the swivel one full turn at a time to determine the best position.



PTO BELT

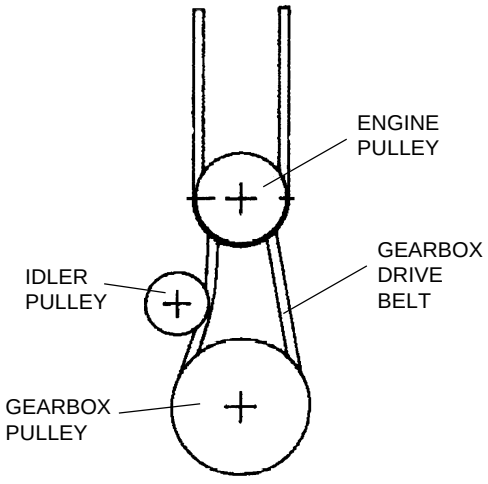
1. Rotate idler arm using a 3/8" ratchet or breaker bar and remove belt.

CUTTERDECK BELT

1. Remove PTO belt.
2. Rotate idler arm using a 3/8" ratchet or breaker bar and remove belt.
3. Replace in the reverse order.

GEARBOX-DRIVE BELT

1. Remove PTO belt from engine clutch.
2. Unbolt clutch stop pin.
3. Rotate idler arm using a 3/8" ratchet or breaker bar.
4. Remove gearbox drive belt.
5. Replace by following steps in reverse order.



View under engine deck

WHEEL-DRIVE BELT

1. Raise the back of the power unit and support with jack stands.

2. Remove swivel **A** from the upper control plate **E**. Rotate the upper control plate **E** so that the pulley **F** moves away from the belt. The swivel **A** can be installed in the larger of the two holes in the control plate **E** as shown, to hold the pulley in place while changing the belt.

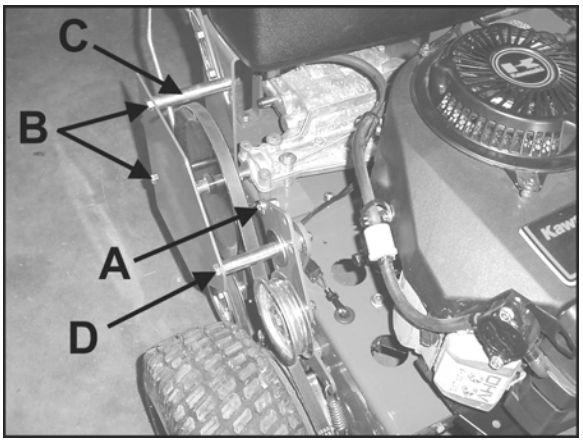
3. Remove bolts **B** and spacers **C** and retain for later use.

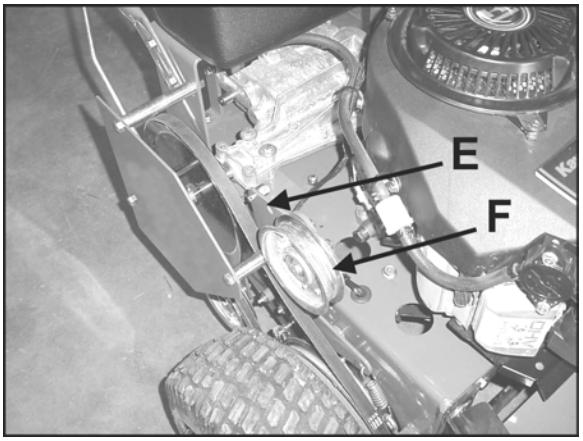
4. Loosen, but do not remove bolt **D** that holds the upper control plate.

NOTE: The wheel drive belt will be slack enough to be removed from its pulleys and passed over the drive wheel.

5. Re-install bolts, spacers, nuts and swivel.

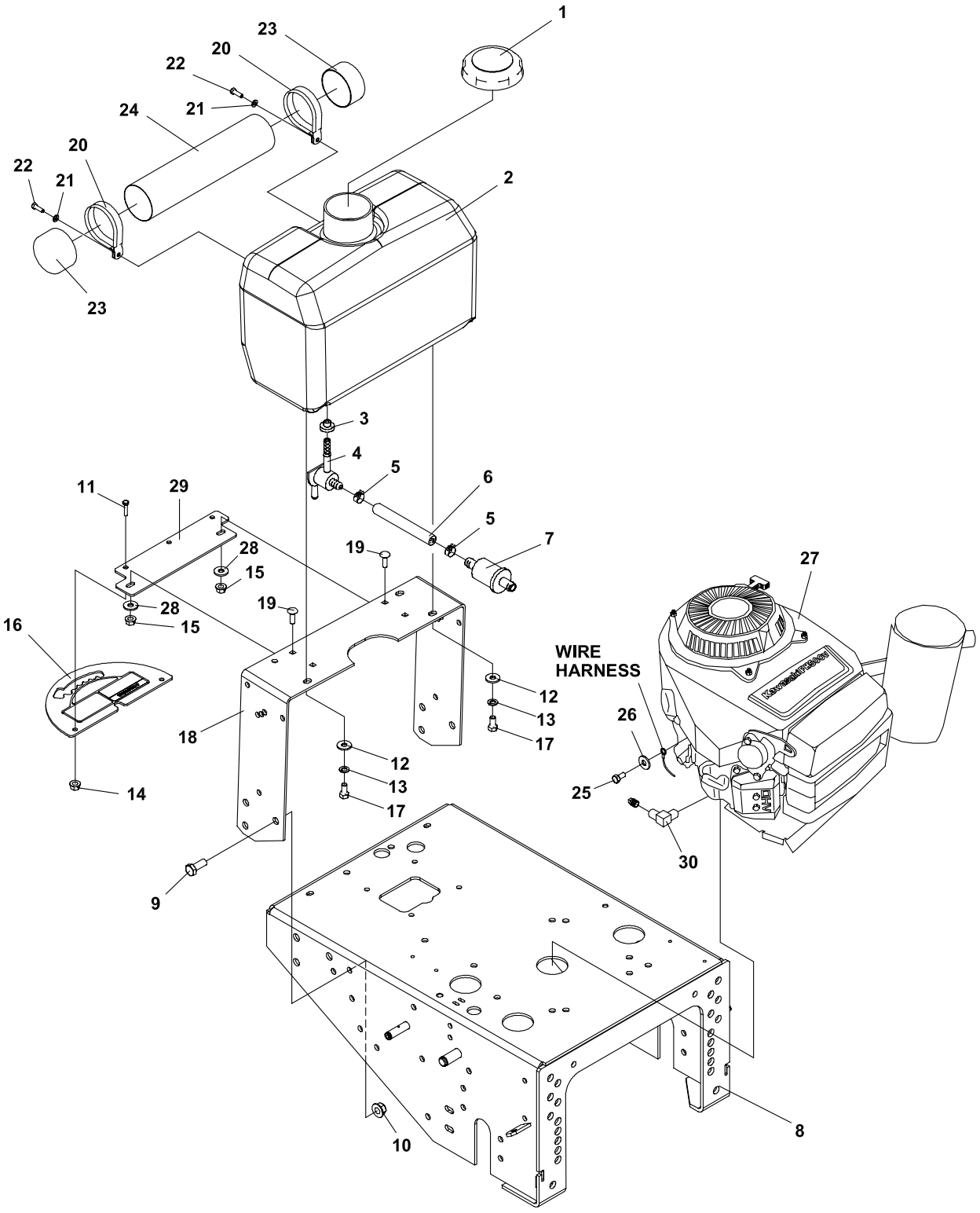
NOTE: If needed, refer to Page 17 for instructions on how to adjust the tension to the drive belt.





UPPER ENGINE DECK ASSY

FIGURE 1



UPPER ENGINE DECK ASSY

FIGURE 1

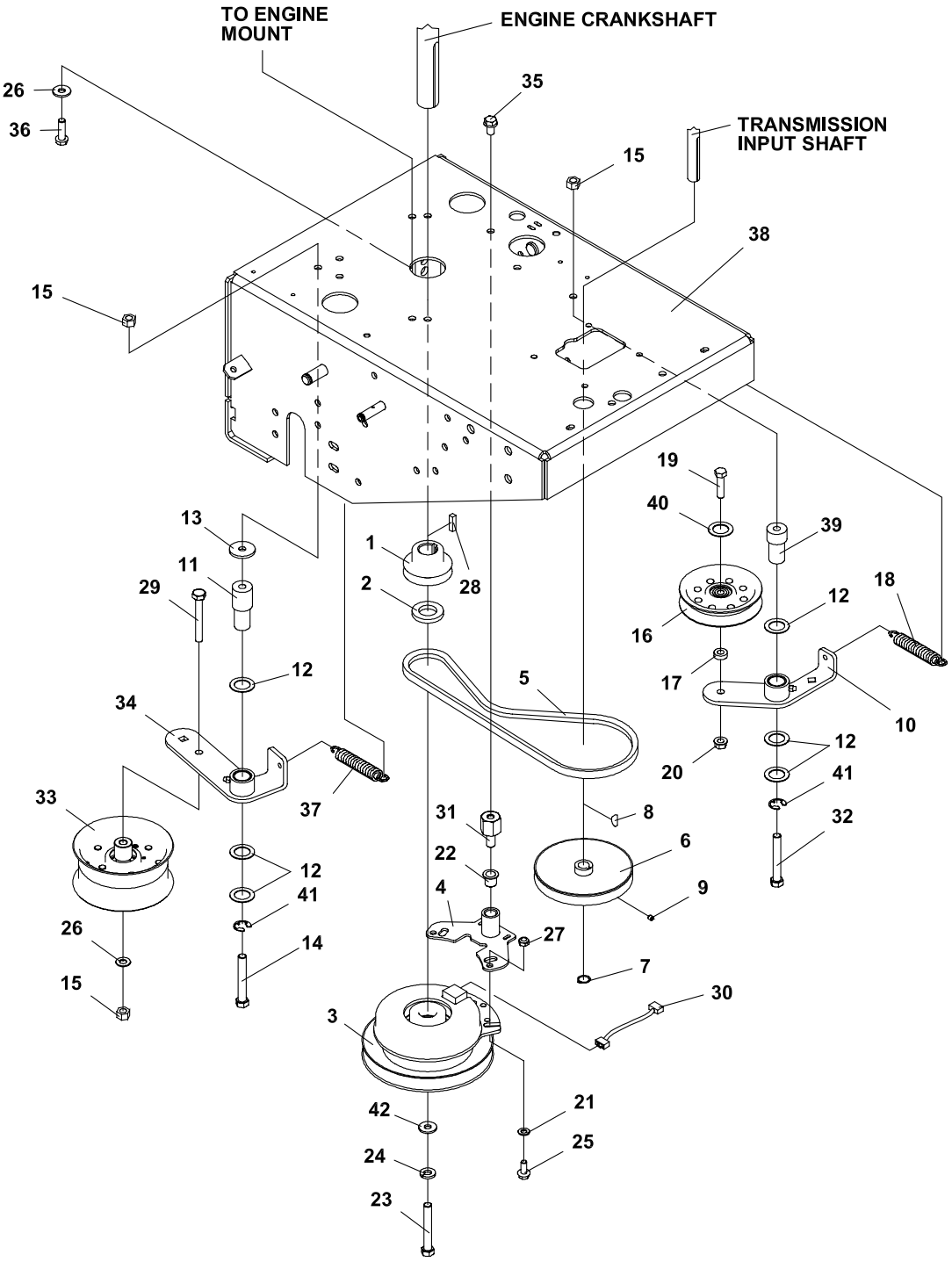
ITEM	PART NO.	DESCRIPTION	QTY
1-1	4130320	CAP-FUEL GASOLINE 3.5	1
1-2	4116345	TANK-FUEL	1
	(INCLUDES ITEMS 3 & 4)		
1-3	4132325	GROMMET-FUEL TANK	1
1-4	38540	S FUEL SHUT-OFF VALV	1
1-5	88042N	HOSE CLAMP	2
1-6	48016-8A	HOSE,.25IDX.50ODX16.5"	1
1-7	38666	FILTER, FUEL	1
1-8	4120204	S-ENGINE DECK W/ LABELS	1
1-9	64123-39	BOLT-HEX 1/2-13X1-1/4	6
1-10	64229-05	LOCKNUT, 1/2-13 NYLON	6
1-11	64123-54	BOLT, 5/16-18X3/4 HEX	2
1-12	64163-31	WASHER	4
1-13	64006-03	LOCKWSHR-HELICAL 3/8	4
1-14	64141-6	NUT, 5/16-18	2
1-15	64229-02	LOCKNUT-NYLON 5/16-18	2
1-16	4118785	S GEAR SELECT PLATE	1
1-17	64123-15	BLT-HEX 3/8-16X3/4	4
1-18	4119638.5	HANDLE-LOWER, GD	1
1-19	64018-15	BLT-CRG 5/16-18X1	2
1-20	38542	CLAMP-DOCU TUBE	2
1-21	64006-01	LOCKWSHR-HELICAL 1/4	2
1-22	64123-89	BLT-HEX 1/4-20 X 3/4	2
1-23	38061A	COVER	2
1-24	2306144	S DOCU TUBE W/LAB	1
1-25	64205-018	BLT MET M8-1.25 X 15	1
1-26	64002-04	LCKWSHR-TTH EXT 5/16	1
1-27	*2721377	ENG-15HP KAW W/CHARG	1
	*2721378	ENG-17HP KAW W/CHARG	1
	2722214	OIL FILTER	1
	2722207	AIR FILTER PAPER ELEMENT	
	2722208	FILTER FOAM PRECLEANER	
	(SERVICE MANUAL 15 HP & 17 HP KAW #99920-2129-03)		
1-28	64163-29	21/64X1X11GA.WASHER	2
1-29	4118204.5	SUPPORT-GEAR SELECT	1
1-30	48255-01	ELBOW 90DEG 3/8	1

ITEM	PART NO.	DESCRIPTION	QTY

*** AVAILABLE THROUGH KAWASAKI DEALER**

LOWER ENGINE DECK ASSY/CLUTCH

FIGURE 2



Gear Drive Midsize

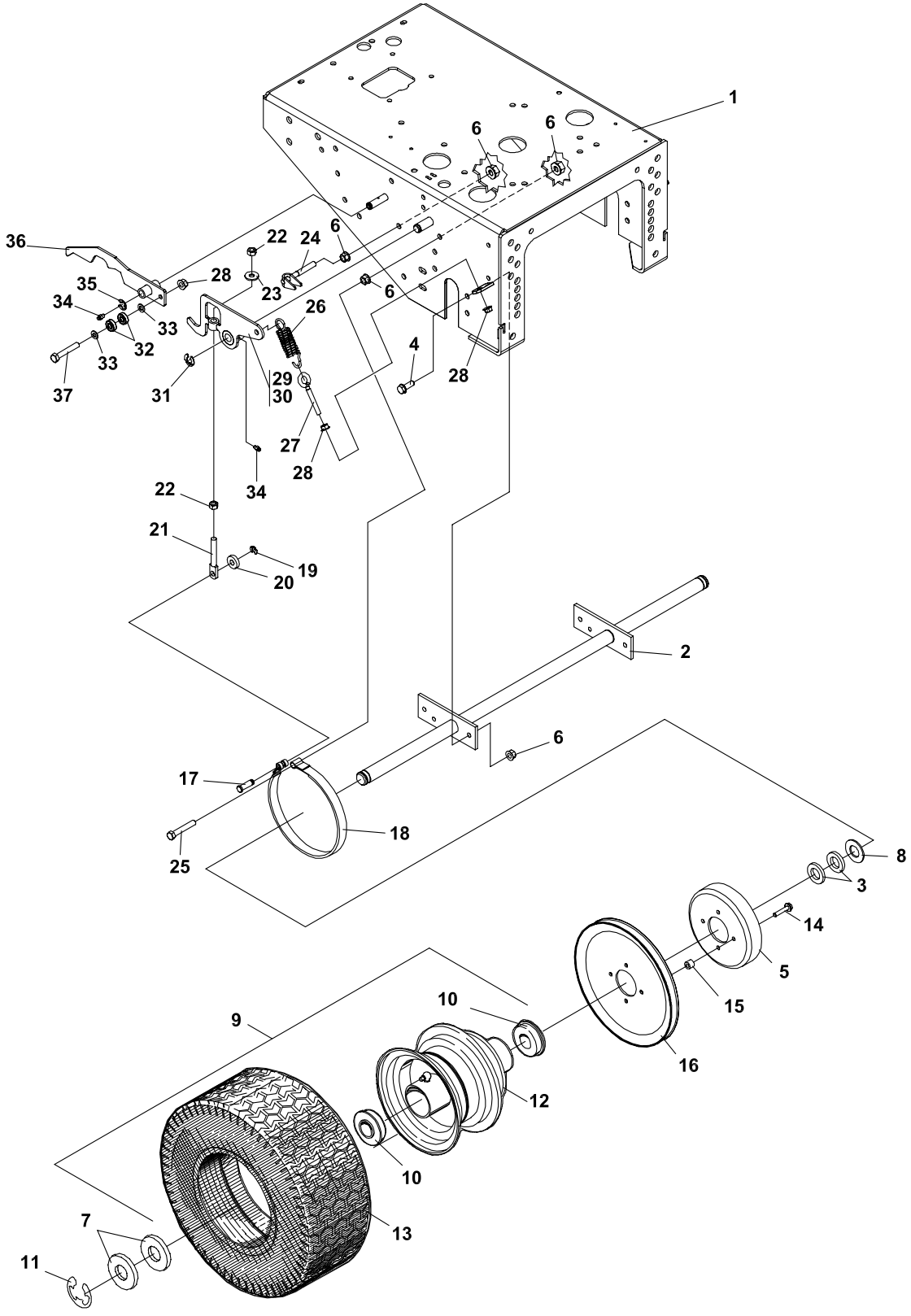
LOWER ENGINE DECK ASSY/CLUTCH

FIGURE 2

ITEM	PART NO.	DESCRIPTION	QTY
2-1	38460	PULLEY-ENGINE	1
2-2	64163-07	1-1/32X1-3/4X1/4 WASH	1
2-3	2721110	CLUTCH-ELECTRIC	1
2-4	2721331.7	WLDMT-CLUTCH STOP MID	1
2-5	2721796	BELT-HA 37.75	1
2-6	2721795	PULLEY-A SECTION 5.50	1
2-7	64144-01	SNAP RING 5/8	1
2-8	64164-19	KEY WOODRUFF.19X.75 #9	1
2-9	64044-1	SCREW-SET 1/4-20X1/4	2
2-10	2721403.7	WLDMT-IDLER ARM	1
2-11	4116712	PIN-PIVOT	1
2-12	64163-65	WASHER 0.890 X 1.375	6
2-13	64163-82	WSHR-FLAT.406X1.44X9GA	1
2-14	64123-138	BLT-HEX 3/8-16X3-3/4	1
2-15	64229-03	LOCKNUT-NYLON 3/8-16	3
2-16	2308000	PULLEY-IDLER 4.00 EOD	1
2-17	33148-01	SPACER	1
2-18	38219	SPRING-TENSION	1
2-19	64123-70	BLT-HEX 3/8-16X1-1/2	1
2-20	64141-4	NUT-WLF 3/8-16	1
2-21	64163-55	WASHER .328X.75X14 GA	2
2-22	38304-03	BRG-FLANGED PLASTIC	1
2-23	64123-155	BLT-HEX 7/16-20 X 3	1
2-24	64006-06	LOCKWSHR-HELICAL 7/1	1
2-25	64123-54	BOLT, 5/16-18X3/4 HEX	2
2-26	64163-31	WASHER .25/64X1X12GA	5
2-27	64229-02	LOCKNUT-NYLON 5/16-18	2
2-28	64164-12	1/4X1/4X1 SQ END KEY	1
2-29	64123-75	BOLT, 3/8-16X3 HEX	1
2-30	2720949	ASSY-CLUTCH WIRE	1
2-31	4121540	PIN-CLUTCH	1
2-32	64123-79	BLT-HEX 3/8-16X3-1/4	1
2-33	2721541	PULLEY-IDLER 5 IN	1
2-34	2721401.7	WLDMT-IDLER ARM	1
2-35	64139-21	BLT-WLF 3/8-16X3/4	1
2-36	64197-005	BLT-TDFM 3/8-16X1-1/4	4
2-37	2188131	SPRING-EXTENSION	1
2-38	4120204	S-ENGINE DECK W/ LABS	1
2-39	4116691	PIN-PIVOT	1
2-40	64163-61	WSHR .81X.406X16GA	1
2-41	64221-04	E-RING.875	2
2-42	64163-51	WSHR.453X1.38X7GA	1

ITEM	PART NO.	DESCRIPTION	QTY

FIGURE 3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Gear Drive Midsize

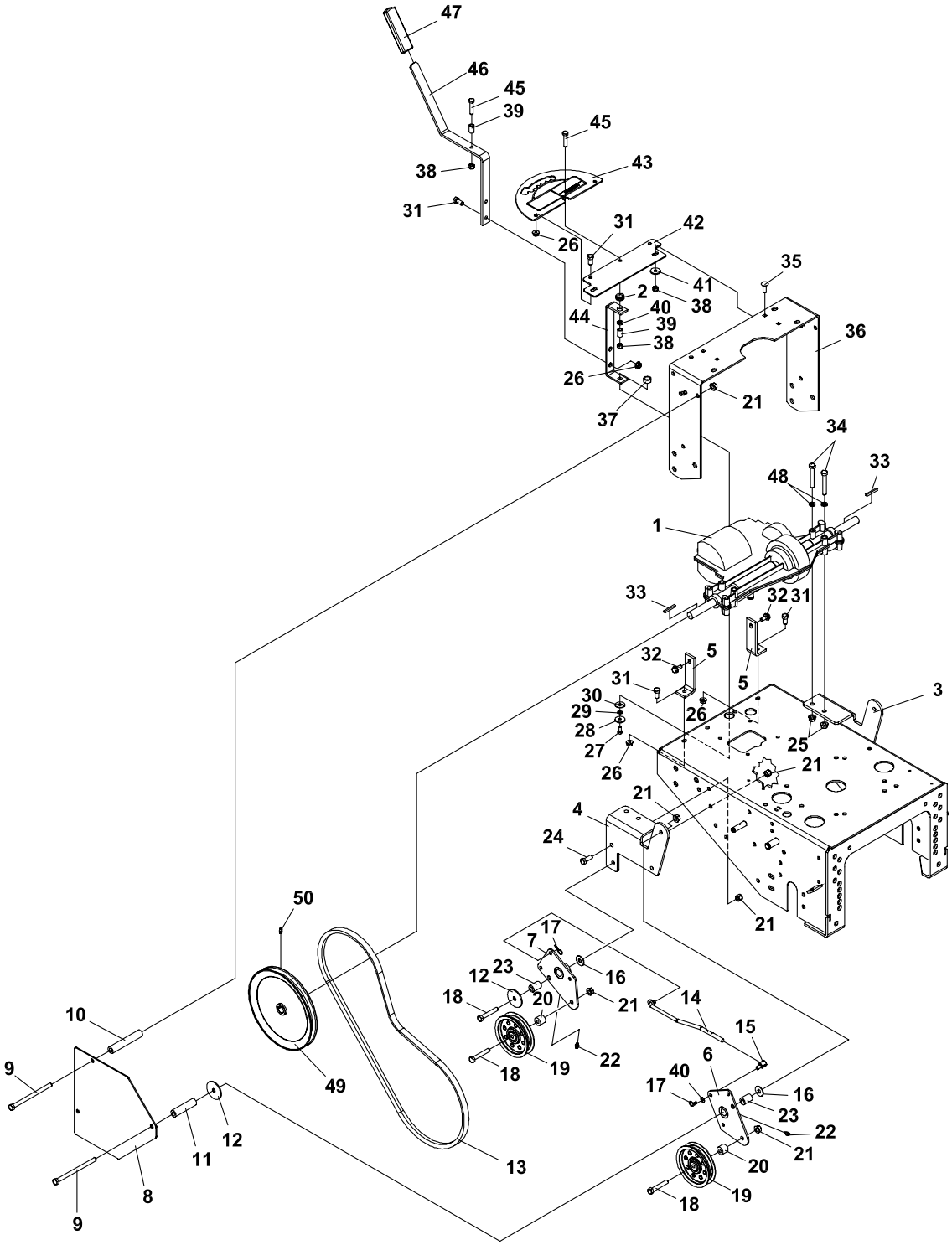
FIGURE 3

ITEM	PART NO.	DESCRIPTION	QTY
3-1	4120204	S-ENGINE DECK W/ LABS	1
3-2	2722491.7	WLDMT-AXLE GD	1
3-3	64163-07	WASHER	4
3-4	64197-005	BLT-TDFM 3/8-16X1-1/4	4
3-5	4116071	DRUM-7.0 INCH BRAKE	2
3-6	64141-4	NUT-WLF 3/8-16	8
3-7	64163-64	WASHER	A/R
3-8	64163-25	WASHER	2
3-9	2721432	WHL ASSY-4PLY 16 X 6.5-8	2
	(INCLUDES ITEMS 10, 12 & 13 QTYS LISTED)		
3-10	2721432-3	S BALL BRG 1.00	2
3-11	64221-1	E-CLIP	2
3-12	2721432-2	S RIM ASSY	1
3-13	2721432-1	S TIRE 16 X 6.5 - 8 4 PLY	1
3-14	64197-021	BLT-TDFM 5/16-18 X 1.75	8
3-15	103044	SPACER,F.R. BEARING	8
3-16	2721794	PULLEY-B SECTION 11.00	2
3-17	33138-07	PIN-CLVS GRVD .38 X 1.25	2
3-18	4116075	BAND-7.0 INCH BRAKE	2
3-19	64144-30	SNAP RING.375	2
3-20	64163-83	WASHER-.406 X 1.00 X.25	4
3-21	4118933	ROD-BRAKE ADJUST	2
3-22	64025-05	NUT-3/8-16 HEX	4
3-23	64163-31	WASHER, 25/64X1X12	2
3-24	36896	WLDMT-SCRAPER DBL	2
3-25	64123-100	BOLT-3/8-16X2-1/4 HEX	2
3-26	148025	SPRING-EXTENSION	2
3-27	64158-03	EYE BOLT	2
3-28	64141-6	NUT, 5/16-18	4
3-29	4117567.7	WLDMT-RH BRAKE	1
3-30	*4117566.7	WLDMT-LH BRAKE	1
3-31	64144-36	SNAP RING.625	2
3-32	38372	BEARING-BALL	4
3-33	64251-003	WHSR-M8	4
3-34	85010N	ZERK, 1/4-28 STR	4
3-35	64221-05	E-CLIP, .328 ID	2
3-36	4119587.5	WLDMT-BRAKE CONTROL	2
3-37	64123-47	BLT-HEX 5/16-18X1-1/4	2

*** NOT ILLUSTRATED**

ITEM	PART NO.	DESCRIPTION	QTY

FIGURE 4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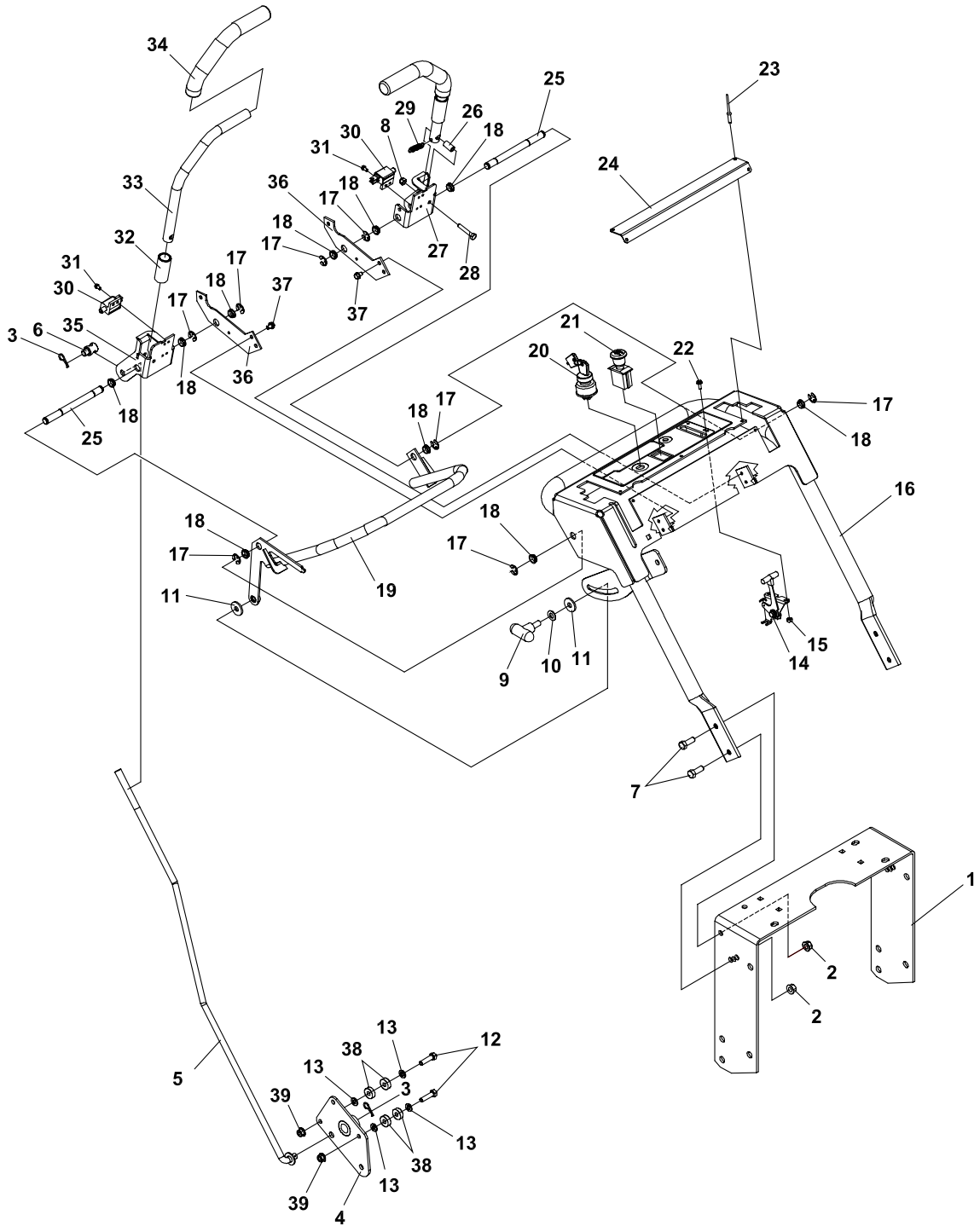
Gear Drive Midsize

FIGURE 4

ITEM	PART NO.	DESCRIPTION	QTY
4-1	2721797	TRANSAXLE-DANA	1
	(SEE FIGURE 7 FOR PARTS BREAKDOWN)		
4-2	118047-02	BUSHING FLIP-LOK, 1/2	1
4-3	4117536.5	MOUNT-GEARBOX, LH	1
4-4	4117564.5	MOUNT-GEARBOX, RH	1
4-5	2721387.5	BRKT-DANA REAR	2
	(ITEMS 6 & 7 ARE REVERSED FOR OPPOSITE SIDE)		
4-6	4117805.5	WLDMT-LHLOWRCNTL PLT	2
4-7	4117803.5	WLDMT-LHUPRCNTRL PLT	2
4-8	4119783.5	COVER-BELT	2
4-9	64123-93	BLT-HEX 3/8-16X5	6
4-10	2721684	SPCR-10.31X18.54X108LG	4
4-11	4119792	SPACER-10.31X18.54X75	2
4-12	64163-17	25/64 X 2 X 11GA WASHR	4
4-13	2721798	BELT-HB 63.50	2
4-14	4117854	WLDMT-LINK ROD	2
4-15	33103	SWIVEL	2
4-16	64163-47	WSHR.391X1.110X16 GA	4
4-17	64168-2	COTTER-HAIRPIN.08X1.19	4
4-18	64123-100	BOLT-3/8-16X2-1/4 HEX	6
4-19	2308000	PULLEY-IDLER 4.00 EOD	4
4-20	33030-09	IDLER-BUSHING	4
4-21	64141-4	NUT-WLF 3/8-16	16
4-22	85010N	ZERK, 1/4-28 STR	4
4-23	4117810	TUBE-SPACER	4
4-24	64123-15	BOLT-3/8-16X3/4 HEX	4
4-25	64229-03	LOCKNUT-NYLON 3/8-16	4
4-26	64141-6	NUT, 5/16-18	6
4-27	64123-220	BOLT HEX 1/4-28 X 5/8	1
4-28	64163-86	WSHR-FLAT.265X.625X.125	1
4-29	64006-01	LOCKWASHER-1/4 HELICAL	1
4-30	128108	WASHER PRLS	1
4-31	64123-54	BOLT, 5/16-18X3/4 HEX	6
4-32	64197-001	BLT-TDFM 5/16-18X3/4	2
4-33	64164-01	KEY-3/16 x 1-1/2 SQ	2
4-34	64123-88	BOLT, 3/8-16X2-3/4 HEX	4
4-35	64018-15	BLT-CRG 5/16-18X1	2
4-36	4119638.5	HANDLE-LOWER, GD	1
4-37	2721954	SPACER- 12.9 X 19.0 X 8 LG	1
4-38	64229-02	LOCKNUT-NYLON 5/16-18	4
4-39	2721955	SPACER-8.74X12.7X20 LG	2
4-40	64163-02	WASHER	3
4-41	64163-29	WASHER-21/64 X 1 X 11GA	2
4-42	4118204.5	SUPPORT-GEAR SELECT	1
4-43	4118785	S GEAR SELECT PLT W/LAB	1
4-44	4121859.7	LEVER-LOWER	1
4-45	64123-69	BOLT-5/16-18X1-1/2 HEX	2
4-46	2721438.7	LEVER-SHIFT	1
4-47	2188155	GRIP, 1/4X1X4-1/2	1
4-48	64163-31	WASHER, 25/64X1X12	4
4-49	2721793	PULLEY-B SECTION 9.00	2
4-50	64044-6	SCREW-SET 5/16-18X1/4	4

OPERATOR PRESENT/THROTTLE CNTRL

FIGURE 5



OPERATOR PRESENT/THROTTLE CNTRL

FIGURE 5

ITEM	PART NO.	DESCRIPTION	QTY
5-1	4119638.5	HANDLE-LOWER, GD	1
5-2	64141-4	NUT-WLF 3/8-16	4
5-3	64168-2	COTTER-HAIRPIN.08X1.19	4
5-4	4117803.5	WLDMT-LHUPRCNTRL PLT	2
	*4117805.5	WLDMT-LHLOWRCNTL PLT	2
5-5	4117924	WLDMT-CONTROL ROD	2
5-6	4117844	SWIVEL-1/2" ROD	2
5-7	64123-50	BOLT-HEX 3/8-16X1	4
5-8	64229-01	LOCKNUT-NYLON 1/4-20	2
5-9	4114727	KNOB-SPEED CONTROL	1
5-10	64163-61	WSHR .81X.406X16GA	1
5-11	2308066	WASHER-.390IDX1.12OD	2
5-12	64123-47	BLT-HEX 5/16-18X1-1/4	4
5-13	64251-003	WHSR-M8	8
5-14	38357-06	CONTROL-THROTTLE	1
5-15	64025-15	NUT-HEX #10-24 KEPS	2
5-16	4120260	S-UPPR HNDL W/ LABS, GD	1
5-17	64221-05	E-CLIP, .328 ID	8
5-18	4116398	BSHG-IGUS, .50 ID X .13	10
5-19	4116405.5	WLDMT-SPEED CONTROL	1
5-20	38148	SWITCH-ENGINE STOP	1
5-21	2721505	SWITCH-PTO	1
5-22	64152-46	SCREW-SLT HH 10-24X1/2	2
5-23	64215-05	RIVET-POP IFI# 64	4
5-24	4116500.5	PANEL-COVER	1
5-25	4116374	BAR-HYDRO CONTROL	2
5-26	4116380	SPACER-CONTROL	2
5-27	4117560	WLDMT-LH CONTROL, GD	1
5-28	64123-07	BOLT, 1/4-20X1-1/2 HEX	2
5-29	4118378	SPRING-EXTENSION	2
5-30	38383	SWITCH-N.C.	2
5-31	64197-015	BLT-TDFM 10-32X1/2	4
5-32	4119625	BHSG-CONTROL LEVER	2
5-33	4116376	TUBE-CONTROL	2
5-34	4117741	GRIP-MOTION LEVER	2
5-35	4117942	WLDMT-RH CONTROL, GD	1
5-36	4116953.5	PLATE-PIVOT SHAFT	2
5-37	64152-23	1/4-20X3/8 LG SP SCREW	6
5-38	38372	BEARING-BALL	8
5-39	64141-6	NUT, 5/16-18	4

***NOT ILLUSTRATED**

ITEM	PART NO.	DESCRIPTION	QTY

FIGURE 6

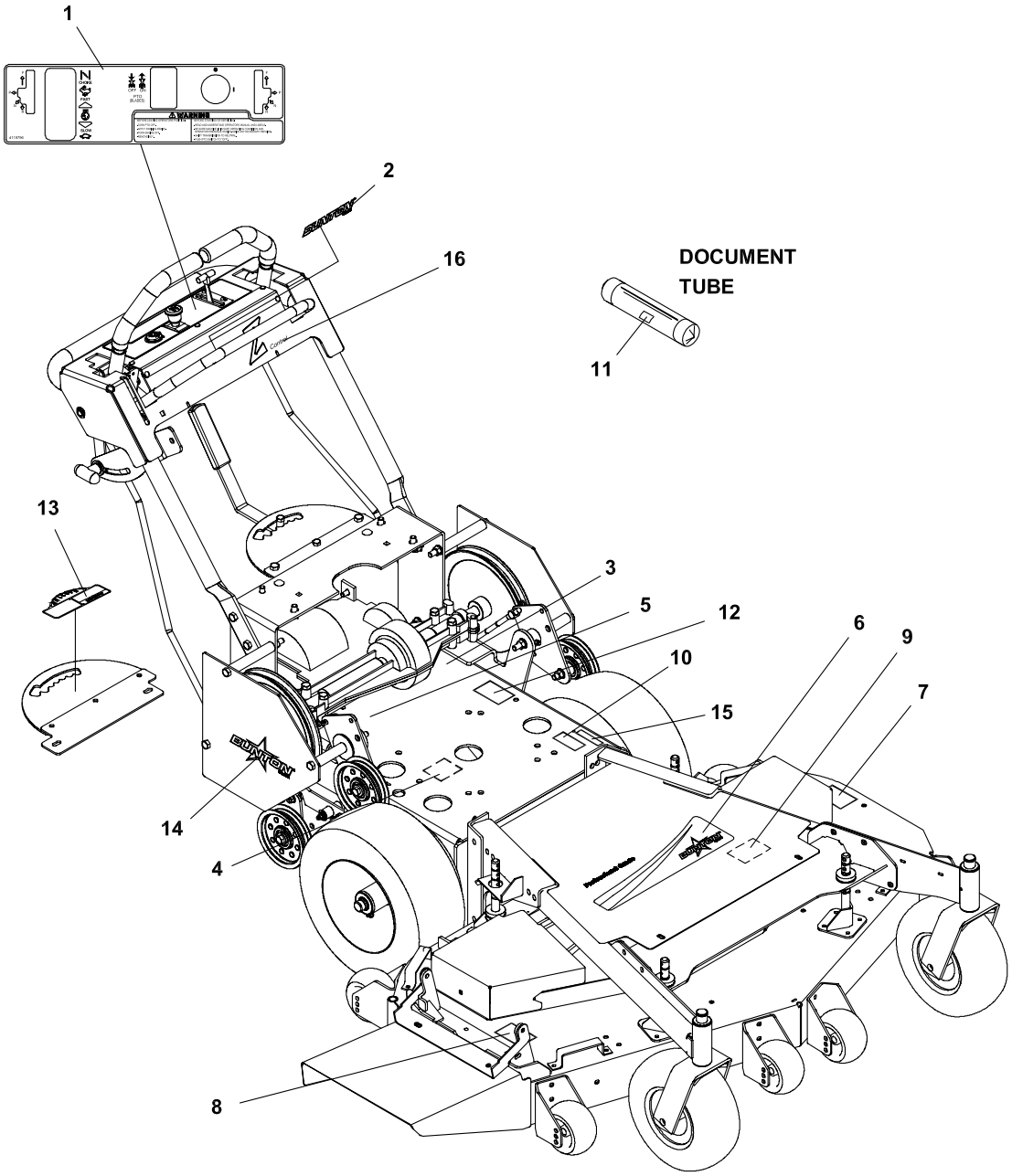
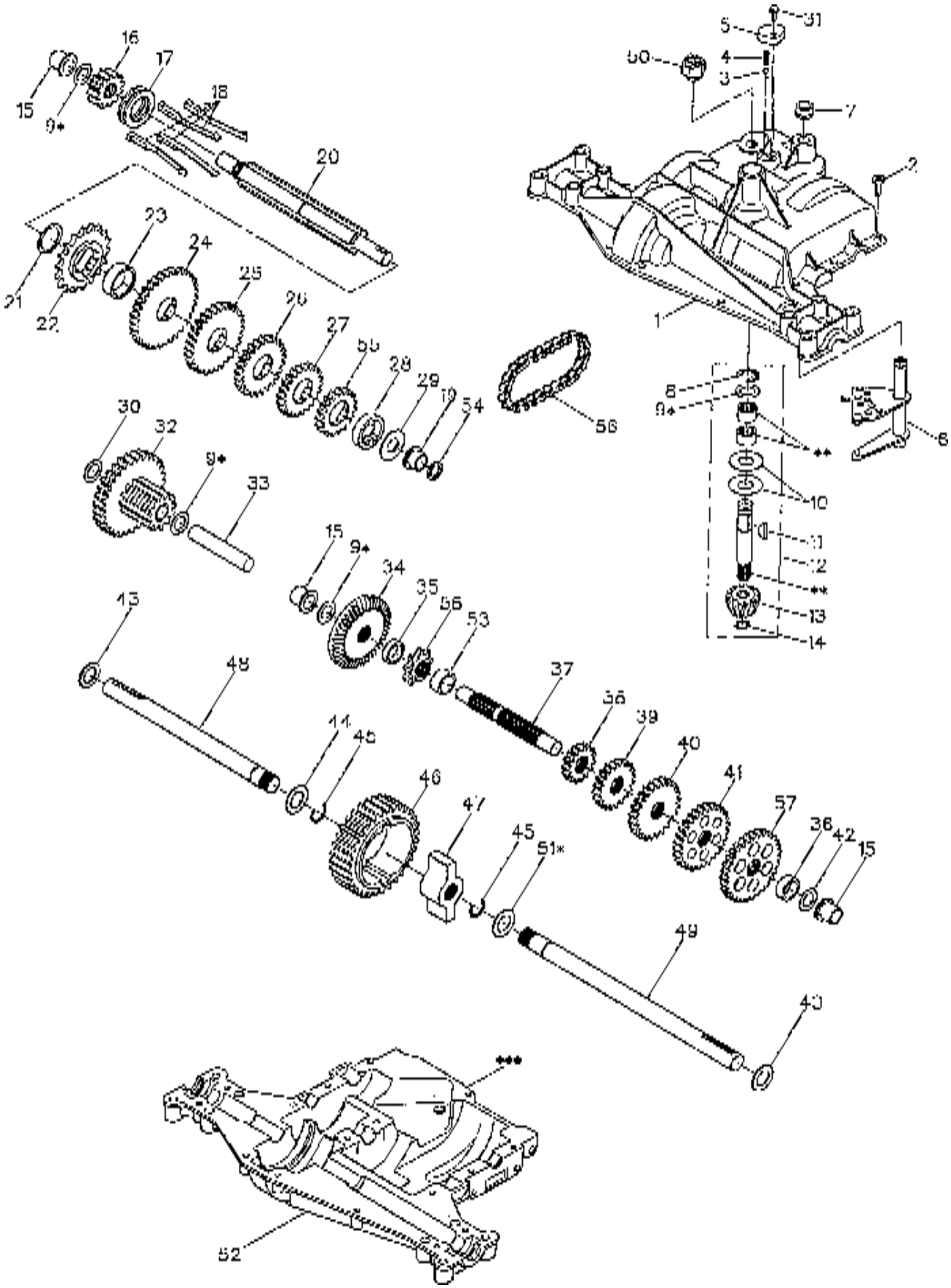


FIGURE 6

ITEM	PART NO.	DESCRIPTION	QTY
6-1	4119796	LABEL-CNTRL PANEL, GD	1
6-2	4124318	LABEL-BUNTON	1
6-3	2000570	LABEL-WARN FUEL PICT	1
6-4	340830	DECAL-CAUTION SPANISH	1
6-5	2000571	LABEL-IMPORTANT	1
6-6	4124250	LABEL-DECK COVER	1
6-7	2000572	LABEL-WARNING BLADES	1
6-8	2000677	LABEL-DANGER/WARNING	1
6-9	2000678	LABEL-ROT PRTS/B-WSHR	1
6-10	2000704	LABEL-MIDSIZE PATENT	1
6-11	2000673	DECAL - OP MAN/TIRES	1
6-12	2000575	LABEL-WARNING	1
6-13	2721821	LABEL-GEAR SELECT	1
6-14	4124265	LABEL-BUNTON	2
6-15	00214-10	DECAL-PATENT NUMBER	1
6-16	4120256	LABEL-Z CONTROL	1

ITEM	PART NO.	DESCRIPTION	QTY

FIGURE 7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51*
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9*
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12
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13
14

Gear Drive Midsize

FIGURE 7

2721797 DANA TRANSMISSION MODEL 4360-126
(COMPLETE UNIT AVAILABLE THRU RANSOMES)

(INDIVIDUAL COMPONENTS AVAILABLE
THROUGH DANA 1-800-848-9086)

ITEM	PART NO.	DESCRIPTION	QTY
7-1	5305-E	HOUSING UPPER	1
7-2	1919	SCRW-TAPPNG1/4-20X.734	16
7-3	5112	BALL-DETENT	2
7-4	3626	SPRING-DETENT	2
7-5	5584	COVER-DETENT	1
7-6	4604	ASSY-KIT-SHIFTER	1
7-7	7010	V-RING	1
7-8	1106	RING-RETAINING	1
7-9	*4689	ASSY-KIT-SHIM .625 SHAFT	4
7-10	3876	WASHR-PLN-.632X1.38X.046	2
7-11	1746	KEY-WOODRUFF NO. 9	1
7-12	6996	ASSY-KIT-INPUT SHAFT	1
7-13	6556	PINION-BEVEL-14T	1
7-14	3624	RING-RETAINING	1
7-15	5510	BEARING-FLANGE	3
7-16	5627	GEAR-SPUR-12T	1
7-17	5303	COLLAR-CLUTCH	1
7-18	6251	ASSY-KIT-CLUTCH KEYS	1
7-19	5511	BEARING-FLANGE	1
7-20	5404	SHAFT-INTERMEDIATE	1
7-21	3627	RING-RETAINING	1
7-22	3830	SPROCKET-18T	1
7-23	3841	SPACER-1.131 X 1.45 X .494	1
7-24	5407	GEAR-SPUR 35T	1
7-25	3867	GEAR-SPUR 30T	1
7-26	3783	GEAR-SPUR 25T	1
7-27	3869	GEAR-SPUR 22T	1
7-28	5027	SPACER-1.133X1.50X.375	1
7-29	3628	WSHR-PLN-.640X1.37X.061	1
7-30	1425	WSHR-PLN-.632X1.00X.046	1
7-31	3405	SCREW-TAPNG10-24X.482	1
7-32	6153	ASSY-GEAR COMB 12T-30T	1
7-33	3967	SHAFT-IDLER	1
7-34	6556	GEAR-BEVEL 42T	1
7-35	3630	SPACER-.781 X 1.00 X .281	2
7-36	3714	SPACER-.781 X 1.00 X .375	1
7-37	5015	SHAFT-DRIVE	1
7-38	5406	GEAR-SPUR 15T	1
7-39	3866	GEAR-SPUR 20T	1
7-40	3719	GEAR-SPUR 25T	1
7-41	3868	GEAR-SPUR 28T	1
7-42	1145	WSHR-PLN.632X1.0X.060	1
7-43	5130	WASHER-NEOPRENE	2
7-44	3735	WSHR-PLN.758X1.25X.050	1
7-45	5031	RING-RETAINING	2
7-46	3839	GEAR-SPUR 32T	1
7-47	5572	CROSS-AXLE	1
7-48	5614	AXLE-LH	1
7-49	5615	AXLE-RH	1
7-50	5267	SWITCH-NEUTRAL	1
7-51	*4691	ASSY-KIT-SHIM .750 SHAFT	1
7-52	6088	ASSY-KIT-HOUSINGS	1
7-53	5016	SPACER-.781 X 1.00 X .494	1
7-54	5508	SEAL-OIL	1
7-55	5202	GEAR-SPUR 19T	1
7-56	3645	SPROCKET-9T	1
7-57	3683	GEAR-SPUR 31T	1
7-58	4300	GREASE	1

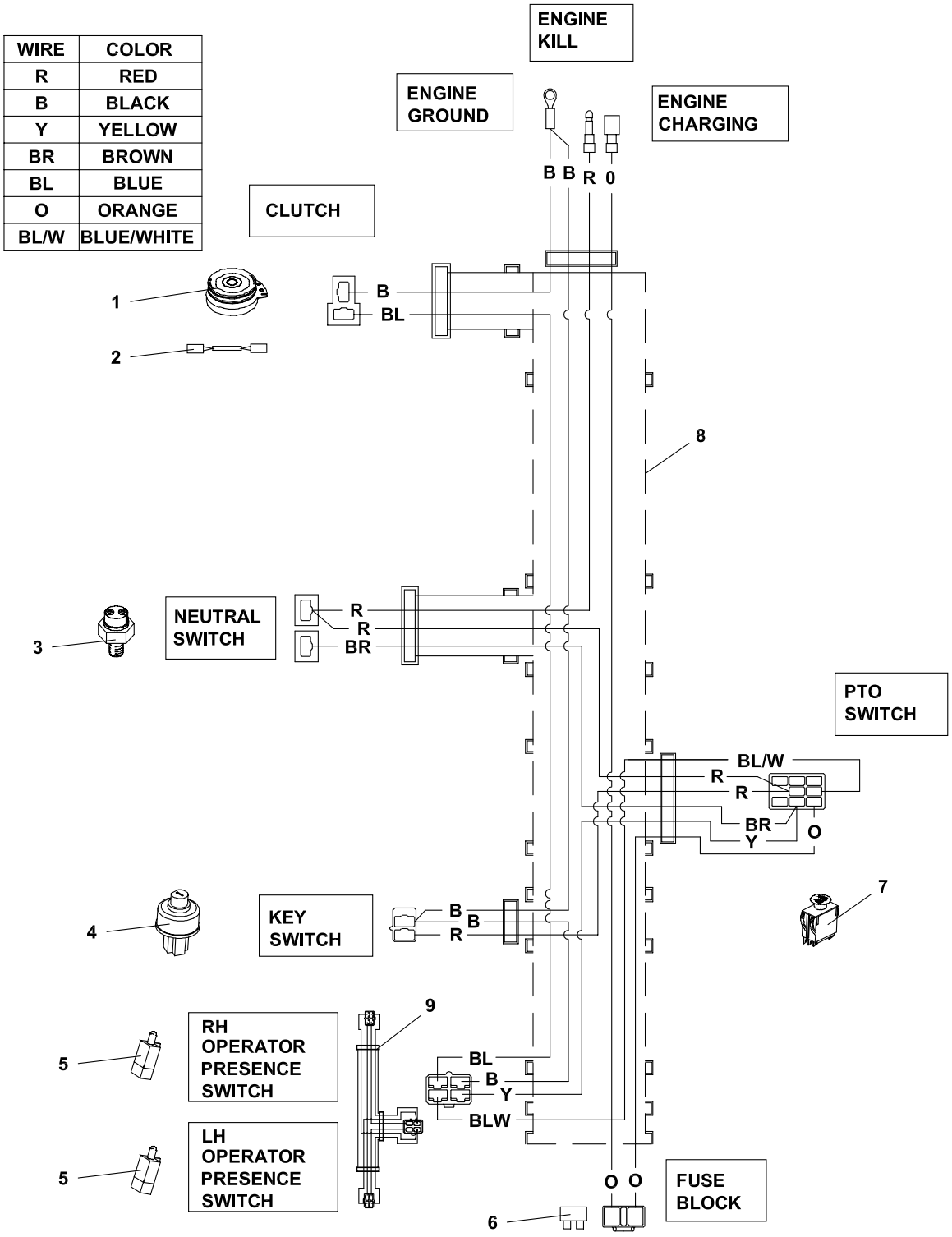
***USE IN VARIOUS COMBINATIONS TO MAINTAIN PROPER CLEARANCE.**

****ORDER KEY NUMBER 12.**

***** SILICONE SEALANT TO BE APPLIED BETWEEN UPPER AND LOWER HOUSINGS. (USE LOCTITE ULTRA GRAY SILICONE 5699 OR EQUIVALENT.)**

SEE YOUR DANA DEALER FOR REPLACEMENT PARTS.

FIGURE 8


WIRE
COLOR
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RED
B
BLACK
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BR
BROWN
BL
BLUE
O
ORANGE
BL/W
BLUE/WHITE
ENGINE KILL
ENGINE GROUND
ENGINE CHARGING
B B R 0
CLUTCH
1
2
B
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8
3
NEUTRAL SWITCH
R
R
BR
PTO SWITCH
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KEY SWITCH
B
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7
9
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RH OPERATOR PRESENCE SWITCH
BL
B
Y
BLW
5
LH OPERATOR PRESENCE SWITCH
O O
FUSE BLOCK
6

FIGURE 8

ITEM	PART NO.	DESCRIPTION	QTY
8-1	2721110	CLUTCH-ELECTRIC (INCLUDES ITEM 2)	1
8-2	2720949	ASSY-CLUTCH WIRE	1
8-3	*	SWITCH-NEUTRAL	1
8-4	38148	SWITCH-ENGINE STOP	1
8-5	108208	SWITCH DBL POLE	2
8-6	148082-10	FUSE 10 AMP	1
8-7	2721505	SWITCH-PTO	1
8-8	4131437	HARNESS-MID GD (INCLUDES ITEM 6)	1
8-9	4131439	JUMPER-BUNTON GD	1

*** SEE DANA TRANSMISSION DEALER**

ITEM	PART NO.	DESCRIPTION	QTY

FIGURE 9

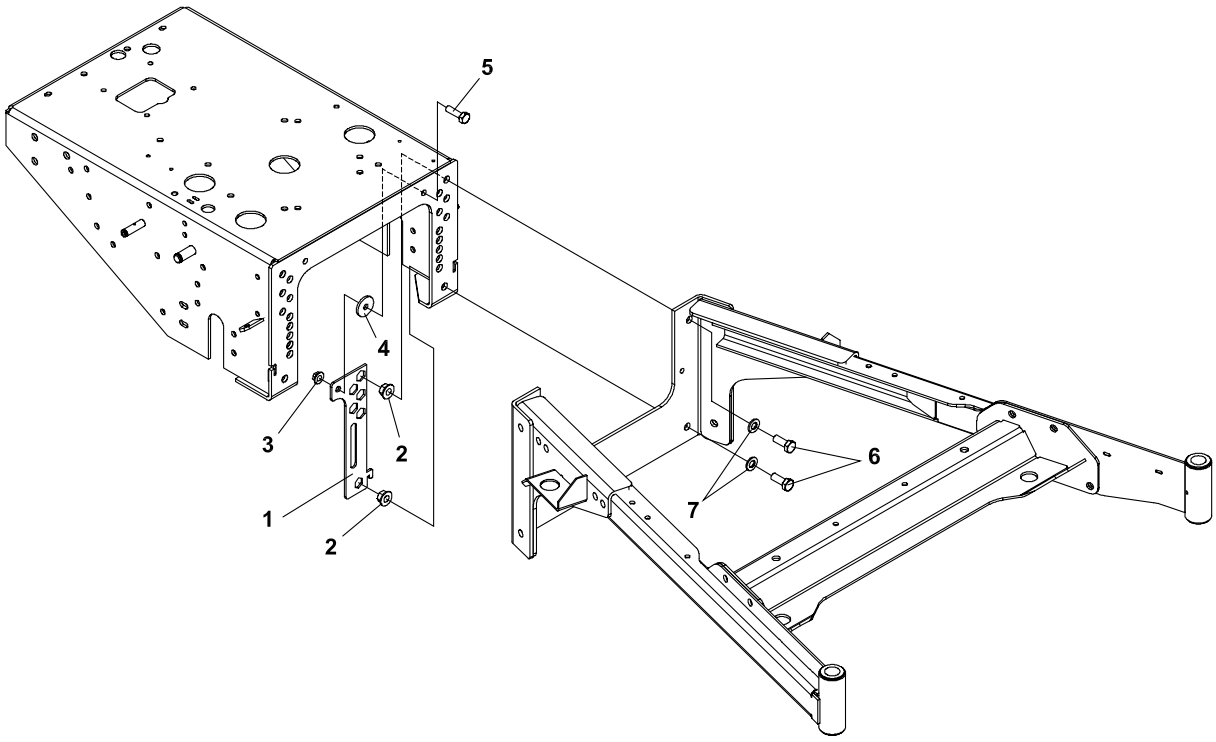
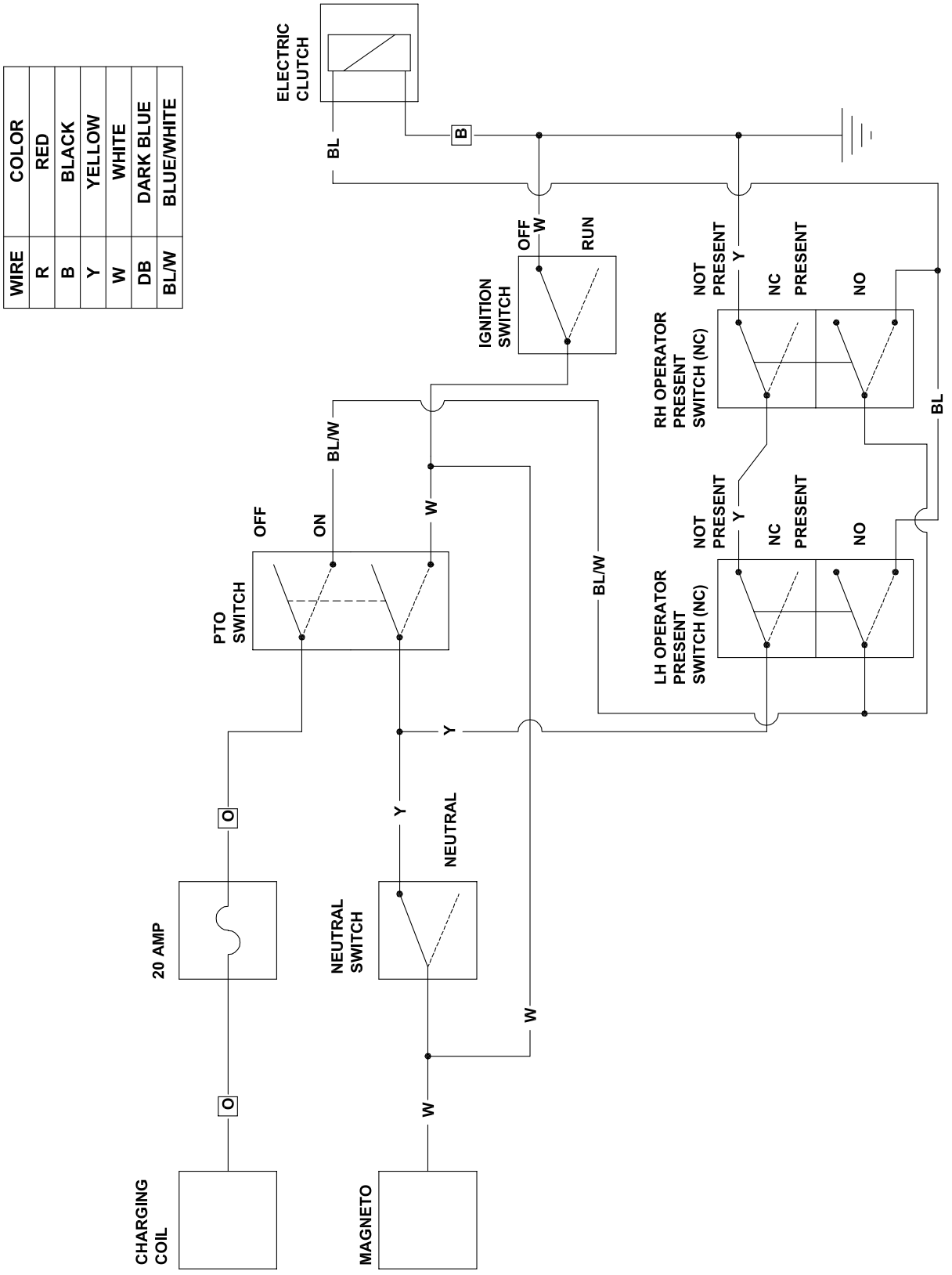


FIGURE 9

ITEM	PART NO.	DESCRIPTION	QTY
9-1	2721991.7	PLATE-NUT	2
9-2	64246-04	NUT-WHIZ M12-1.75	12
9-3	64141-4	NUT-WLF 3/8-16	2
9-4	64163-82	WASHER	2
9-5	64123-50	BOLT-HEX 3/8-16X1	2
9-6	64263-018	BLT-FLG HD M12-1.75 X 30	4

ITEM	PART NO.	DESCRIPTION	QTY

FIGURE 10


WIRE
COLOR
R
RED
B
BLACK
Y
YELLOW
W
WHITE
DB
DARK BLUE
BL/W
BLUE/WHITE
ELECTRIC CLUTCH
BL
B
OFF
W
RUN
IGNITION SWITCH
NOT PRESENT
Y
NC
PRESENT
NO
RH OPERATOR PRESENT SWITCH (NC)
BL
BL/W
OFF
ON
W
PTO SWITCH
BL/W
NOT PRESENT
Y
NC
PRESENT
NO
LH OPERATOR PRESENT SWITCH (NC)
Y
O
Y
NEUTRAL
20 AMP
NEUTRAL SWITCH
W
O
W
CHARGING COIL
MAGNETO

World Class Quality, Performance And Support

Equipment from Jacobsen, a Textron company, is built to exacting standards ensured by ISO 9001 and ISO 14001 registration at all our manufacturing locations.

A worldwide dealer network and factory-trained technicians backed by Textron Parts Xpress provide reliable, high-quality product support.

JACOBSEN
A Textron Company

BOB-CAT BROUWER BUNTON CUSHMAN RYAN STEINER