

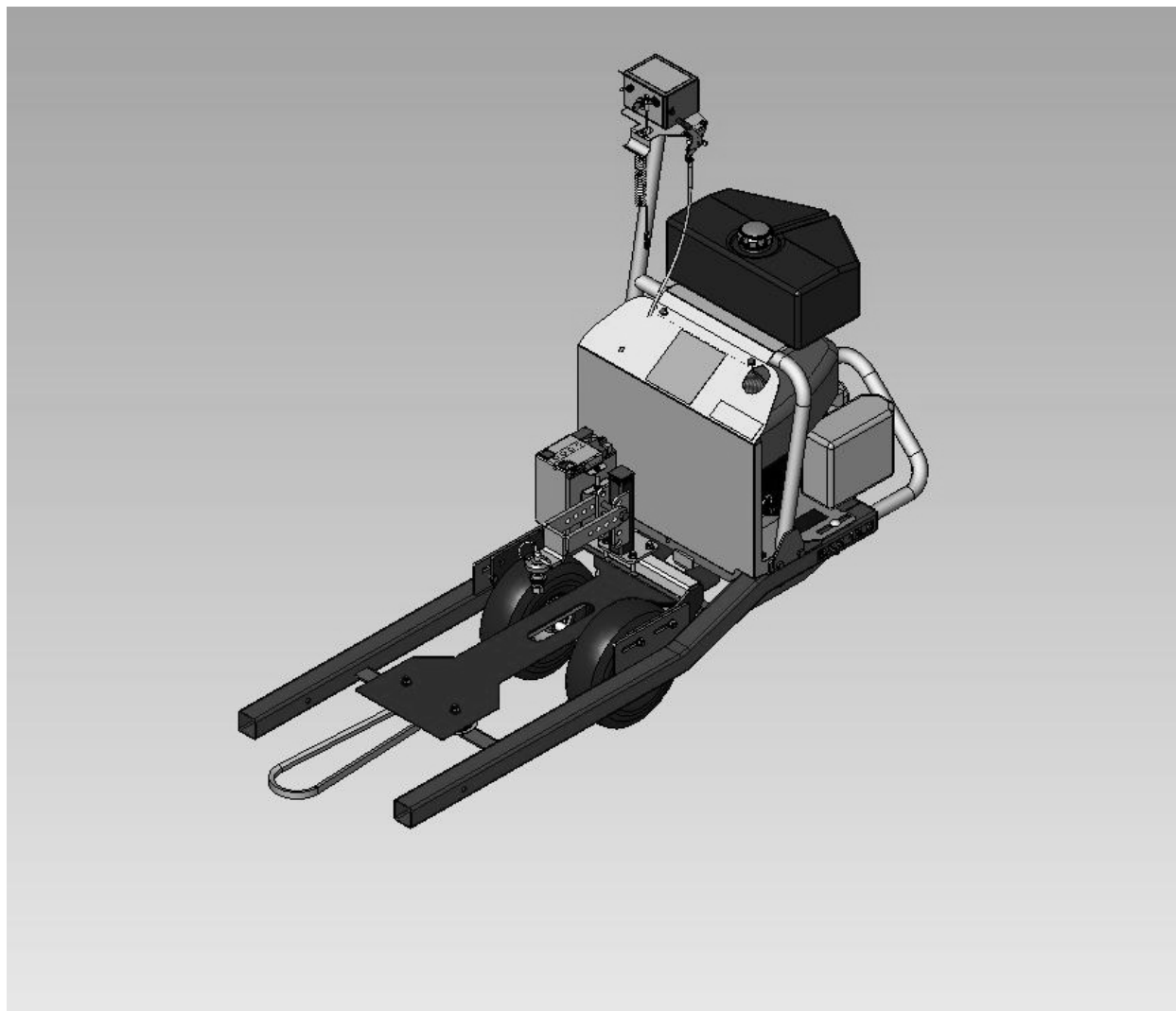


**Power Unit
18.5HP Briggs & Stratton**

Assembly/Operators/Parts Manual

English Language Version 08

Printed: November 2007



READ & SAVE THIS MANUAL

QUADIVATOR INC.
1000 6th Ave. NE
Portage la Prairie, MB
Canada, R1N 3C5
www.quadivator.com

Part #: 88436C

QUADIVATOR WARRANTY POLICY

The warranty for the Quadivator Product is a limited warranty.

The manufacturer's warranty to the original customer is - the product is free from defects in materials and workmanship for a period of one (1) year from the date of purchase by the original purchaser.

We will repair or replace, at our discretion, parts found to be defective due to materials and workmanship.

The warranty is subject to the following limitations and exclusions:

1. Engine Warranty - all engines utilized on our products have a separate warranty extended to them by the engine manufacturer. Any engine service difficulty is the responsibility of the engine manufacturer and in no way is Quadivator Inc. or its agents responsible for the engine warranty. The Briggs & Stratton Engine Service Hot Line is 1-800-233-3723.

2. Commercial Use - the warranty period for any product used for commercial or rental use is limited to ninety (90) days from the date of original purchase.

3. Limitations - the warranty applies only to products which have been properly assembled, adjusted and operated in accordance with the instructions contained within this manual. The warranty does not apply to any product of Quadivator Inc. that has been subject to alteration, misuse, abuse, improper assembly or installation, shipping damage or normal wear of the product.

4. Exclusions - excluded from this warranty are normal wear, normal adjustments and normal maintenance.

In the event you have a claim under this warranty, you must return the product to an authorized service dealer. All transportation charges, damage or loss incurred during transportation of parts submitted for replacement or repair under this warranty shall be borne by the purchaser. Should you have any questions concerning this warranty, please contact us toll-free at 866 770-2169 or on our web-site at www.quadivator.com. The model, serial numbers, date of purchase and the name of the authorized Quadivator dealer from whom you purchased the Quadivator Product will be needed before any warranty claim can be processed.

This warranty does not apply to any incidental or consequential damages and any implied warranties are limited to the same time periods stated for all expressed warranties. Some provinces and states do not allow the limitation of consequential damages or limitations on how long an implied warranty may last, so the above limitations may not apply to you. This warranty gives you specific legal rights and you may have other rights, which vary from province to province or state to state.

This is a limited warranty as defined by the Magnuson-Moss Act of 1975.

FOREWORD

Congratulations on the purchase of your new Quadivator B & S 18.5 PU Power Unit. To obtain the best use of your Power Unit, read this manual *carefully*. It will help you become familiar with the operation and maintenance of the B & S 18.5 PU. It is Quadivator Policy to use all research, design and manufacturing improvements to improve our Power Unit. At the time of printing, this may result in some of the minor parts in the manual becoming outdated.

Quadivator will have the most up to date parts and service information – call 866 770-2169 for service information and parts orders!

Contact Information

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SAFETY FIRST

This symbol, the industry's "Safety Alert Symbol", is used throughout this manual and on labels on the unit itself to warn the possibility of personal injury.

Read these instructions carefully.

It is essential that you read the instructions and safety regulations before you attempt to assemble or use this unit.



DANGER

Indicates an imminent hazardous situation, which if not avoided, will result in death or serious injury.



WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION

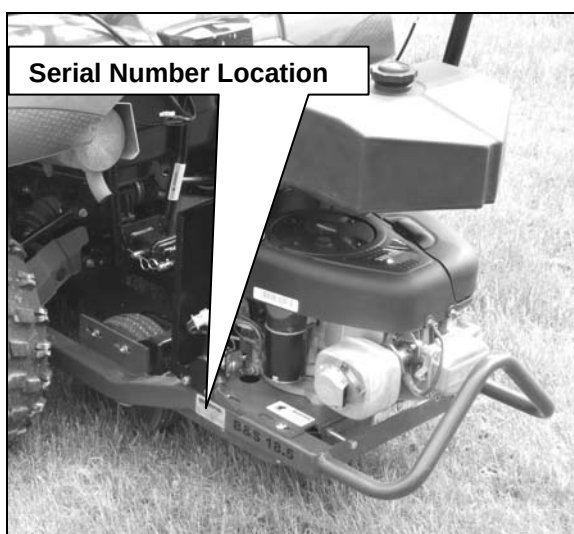
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTE

A NOTE provides key information to make procedures easier or clearer.

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PRE- DELIVERY CHECKLIST

Check off all items as they are found satisfactory or after adjustments are made:

- ☐ All safety shields and guard are securely in place.
- ☐ All decals are in place and readable.
- ☐ Tighten all hardware – see Bolt Torque Chart in Service Section.
- ☐ Check tire inflation pressure and set to 45 psi.
- ☐ Check the Engine has adequate fuels, oils in it. Install battery (not supplied with unit).
- ☐ Check the drive belt and adjust properly – see Service Section.



CAUTION

When operating any ATV attachments with the Power Unit – Always attach the clip end of the Tether Cord to your belt, until you dismount from the ATV. The switch the cord is attached to will shut off the engine if pulled deliberately or by inadvertent dismount from the ATV seat.

- ☐ Start the Quadivator B&S 18.5 PU Power Unit and allow it to run for 5 – 10 minutes, check for excessive operation or unusual noise.
- ☐ The Quadivator B&S 18.5 PU Power Unit has been tested and to the best of my knowledge, is ready to be delivered to the customer!

Date Pre-delivered –

Signature –

OWNER'S REGISTRATION

Name –

Address –

City/Town –

State/Prov. –

Postal/Zip (Mail) Code -

Model & Serial # –

Date Sold –

DELIVERY Checklist – Review with customer:

- ☐ Tell the customer not to remove any of the safety shields or guards.
- ☐ Review the Quadivator Warranty.
- ☐ Review the Safe Operation and Service of the B&S 18.5 PU Power Unit.
- ☐ Review the Correct Oil Level & Specification for outside operating temperature.
- ☐ Review the Daily and Periodic Lubrication and Maintenance.
- ☐ Review the Daily and Periodic Inspections.
- ☐ Review with the customer the Parts & Service Availability.

Prior to delivery to the customer, do the following:

- ☐ Record Serial Numbers for the Quadivator Products
- ☐ Sign and copy this section for the dealer's record.
- ☐ Give the customer the Operators Manual and encourage the customer to read the manual.

Date Delivered –**Signature –**

SAFE OPERATION



DANGER

Failure to observe the following safety instructions could result in serious injury and or death.

1. General Operation

1. Read, understand, and follow all instructions on the machine and in the manual(s) before starting.
2. Do not put hands or feet near rotating parts or under the machine.
3. Allow only responsible adults, who are familiar with the instructions, to operate this machine.
4. Be thoroughly familiar with the controls and the proper use of the equipment. Know how to stop the unit and disengage the controls quickly.
5. Be sure the area is clear of bystanders before operating. Stop machine if anyone enters the area.
6. NEVER CARRY PASSENGERS while operating any attachments used with the Power Unit - EVEN IF YOURS is a TWO-UP ATV!



DANGER:

While operating any ATV Attachments with the Power Unit – ALWAYS attach the clip end of the Tether Cord to your belt, until you dismount from the ATV. The switch, the cord is attached to, will shut off the engine if pulled deliberately or by an inadvertent dismount from the ATV seat.

7. Disengage the clutch on the ATV and shift the ATV into neutral before starting the engine (motor) on the Power Unit. Always look down and behind before and while backing up.
8. Handle fuel with care, it is highly flammable:
 - (a) Use an approved fuel container.
 - (b) Never add fuel to a running engine or hot engine.
 - (c) Fill fuel tank outdoors with extreme care. Never fill fuel tanks indoors.
 - (d) Replace gasoline cap securely and wipe up spilled fuel.

9. Do not operate machine without the guards and other safety devices in place and working.

10. Do not wear loose clothing or jewelry.

11. Slow down unit before turning.

12. Never leave a running machine unattended. Always turn off unit, disengage drives, secure parking brake, stop engine and remove key before dismounting.

13. Shut off engine and wait for all parts to come to a complete stop before cleaning, servicing and/or unplugging the machine.

14. Operate machine in daylight or good artificial light.

15. Do not operate machine while under the influence of alcohol, medication or drugs.

16. Watch for traffic when operating near or crossing roadways.

17. Use extra care when loading or unloading the machine into a trailer or truck.

18. Always wear eye protection when operating or servicing machine.

19. Let engine (motor) and machine adjust to outdoor temperatures before operating attachments.

20. Do not run engine indoors, except when starting the engine. Open the outside doors: exhaust fumes are dangerous.



WARNING:

Data indicates operator age 60 years and above are involved in a large percentage of riding mower-related injuries. These operators should evaluate their ability to operate the mower safely enough to protect themselves and others from serious injury.

1.2 Slope Operation

1. Slopes are a major factor related to loss of control and tip-over accidents, which can result in severe injury or death.
2. Operation on all slopes requires extra caution. Do not use the attachment, if you cannot back up the slope or if you feel uneasy on it.
3. Go up and down slopes, not across.
4. Watch for holes, ruts, bumps, rocks, or other hidden objects. Uneven terrain could overturn the machine. Tall grass can hide obstacles.
5. Choose a low ground speed so you will not have to stop or shift while on a slope.
6. Do not work on wet grass. Tires may lose traction.
7. Always keep the machine in gear when going down slopes. Do not shift to neutral and coast downhill.
8. Avoid starting, stopping, or turning on a slope. If the tires lose traction, disengage the attachment and SLOWLY proceed straight down the slope.
9. Keep all movement on slopes slow and gradual. Do not make sudden changes in speed or direction, which could cause the machine to roll over.
10. Use extra care while operating machine with additional or other attachments; they can affect the stability of the machine. Do not use on steep slopes.
11. Do not try to stabilize the machine by putting your foot on the ground.
12. Do not work near drop-offs, ditches or embankments. The machine could suddenly roll over if a wheel goes over the edge or if the edge caves in.

1.3 Children



WARNING:

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the activity. *Never* assume that children will remain there - the last time you saw them.

1. Keep children out of the working area and under the watchful care of a responsible adult - other than the operator.
2. Be alert and turn machine off if a child enters the area.
3. Before and while backing, look behind and down for small children.
4. Never carry children, even with the attachment shut off. They may fall off and be seriously injured or interfere with safe machine operation. Children who have been given rides in the past may suddenly appear around the unit for another ride - and be run over or backed over by the machine.
5. Never allow children to operate the machine!
6. Use extreme care when approaching blind corners, shrubs, trees, or other objects that may block your view of a child.

1.4 Towing

1. Tow only with a machine having a hitch designed for towing. Do not attach towed equipment except at the hitch point.
2. Follow the manufacturer's recommendation for weight limits for towed equipment and towing on slopes.
3. Never allow children or others in or on towed equipment.
4. On slopes, the weight of the towed equipment may cause loss of traction and loss of control.
5. Travel slowly and allow extra distance for stopping.

1.5 General Service

- 1.** Keep all nuts and bolts tight (to proper torque) to be sure the equipment is in safe working condition.
- 2.** Never tamper with safety devices. Check their proper operation regularly.
- 3.** Keep machine free of grass, leaves, or other debris build-up. Clean up oil or fuel spillage and remove any fuel-soaked debris. Allow machine to cool before storing.
- 4.** If you strike a foreign object, stop and inspect the machine. Repair, if necessary, before restarting.
- 5.** Never make any adjustments or repairs with the engine running. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
- 6.** Never operate the Power Unit without proper guards, plates or other safety protective devices in place.
- 7.** If the unit should start to vibrate abnormally, stop the engine (motor). Check immediately for the cause.
- 8.** Never operate the machine at high transport speed and use care when backing up.
- 9.** Check brake operation frequently. Adjust and service as required.
- 10.** Maintain or replace safety and instruction labels, as necessary.
- 11.** Use only attachments and accessories approved by the manufacturer of the Power Unit.

1.6 Maintenance

- 1.** Check engine mount bolts and all other fasteners at frequent intervals for tightness so the equipment is in safe operating condition.
- 2.** Maintain or replace safety and instruction labels as necessary.
- 3.** To avoid personal injury or property damage – Use extreme care in handling gasoline. Gasoline is extremely flammable and vapors are explosive. Extinguish all cigarettes, cigars, pipes and other potential sources of ignition.
- 4.** Use only an approved gasoline container.
- 5.** Never remove gas cap or add fuel with the engine running. Allow engine to cool before refueling.
- 6.** Never fuel the machine indoors.
- 7.** Never fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Remove gas powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment with a portable container, rather than from a gasoline dispenser nozzle. Keep the nozzle in contact with the rim of the fuel tank or container opening at all times until the fueling is complete. Do not use a nozzle lock-open device.
- 8.** Never overfill fuel tank. Replace gas cap and tighten securely.
- 9.** Never tamper with safety devices and check their operation regularly.

2.0 Set-Up – Power Unit

2.1 Assembly of B&S 18.5PU Power Unit

The following is the check list contained in the Quadivator B&S 18.5PU Shipping Container:

1. **Briggs and Stratton** Operating & Maintenance Manual for the Intek 18.5HP Engine.
2. **Assembly/Operators/Parts Manual** for the Power Unit – 08 Model, Part # 88436C.
3. **Components for the Assembly** in the container:
 - a. Power Unit with the folded down tank support.
 - b. Fuel Tank – attached to the power unit rails.
 - c. Engine Shield.
 - d. Hitch Pin Package.
 - e. Keys and Safety Tether.

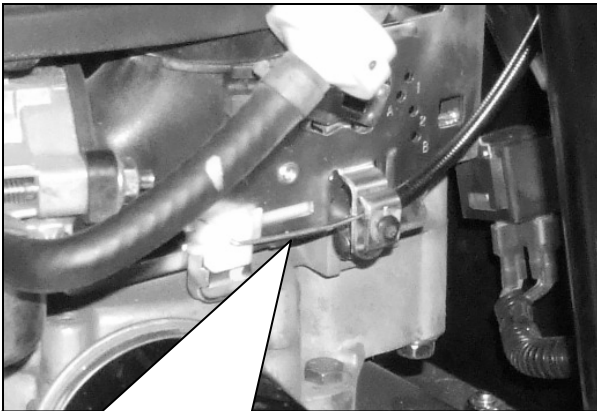
1. Remove the Components from the Shipping Container – check for any damage that may have occurred during shipping to your dealership!

2. Block up the rear of the Power Unit with two (2) – 19" (475 mm) wooden 2 x 4 sections to level the frame!

3. Remove the fuel tank from its shipping location and attach the tank to the tank mount frame with the hardware supplied – in the base of the tank!

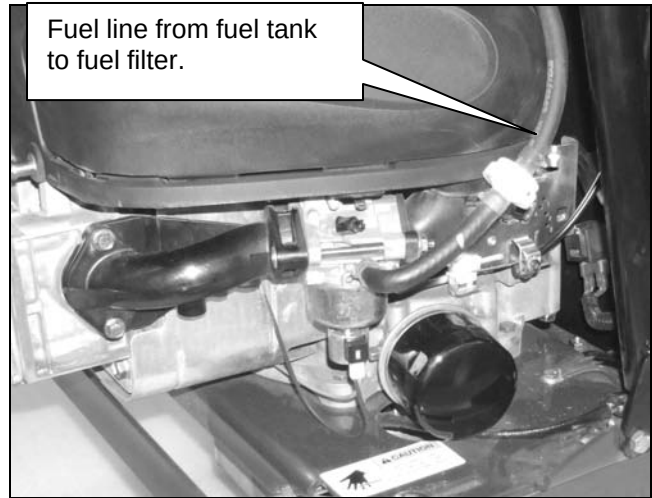
4. Move the fuel tank stand assembly to the vertical position and mount it with the hardware provided.

5. Attach the throttle cable shown on the engine – adjust so that when the throttle is pushed away from the operator, the choke is fully actuated.



Insert the throttle cable into the plastic slider and then - attach with the screw to secure. This allows complete throttle stroke – including choke operation.

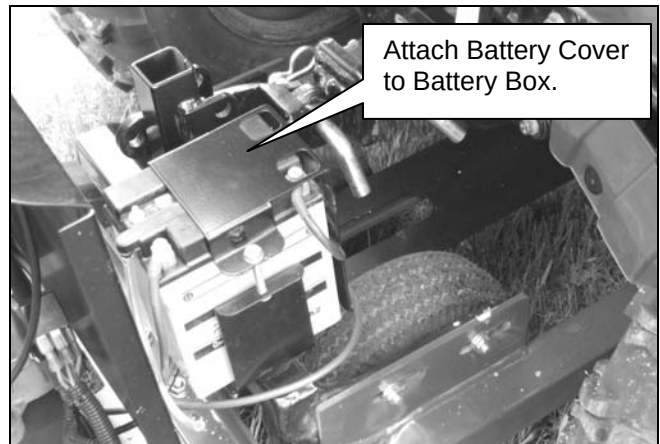
6. Attach the fuel line coming from the bottom of the fuel tank to the fuel filter with the provided clip on the end of the fuel line attached to the tank. Connect fuel filter to short fuel line (engine side).



NOTE: When attaching the fuel line to the filter on the engine, keep the filter away from the engine a minimum of 1" (25 mm) from the engine. Failure to meet this required clearance may result in the filter rubbing on the engine leading to a fuel leak.

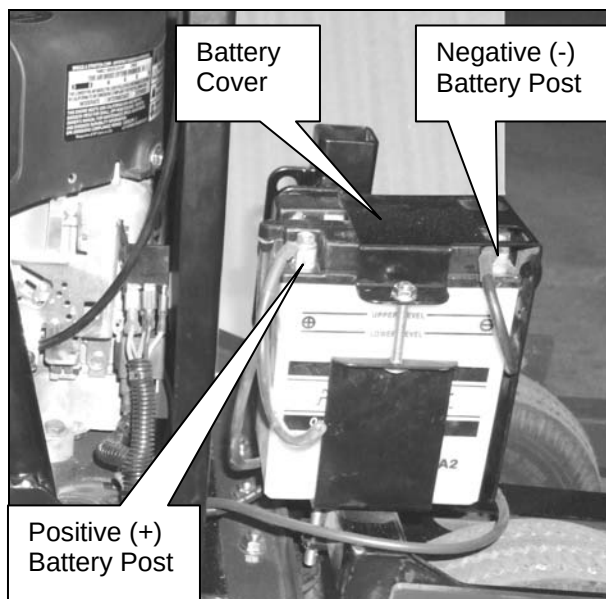
7. Install the battery in the battery box. Position battery so battery terminals are to the outside of the frame.

NOTE: Battery is not supplied with unit. Use a battery type; YB-14-A2 (Yuasa YuMicron), 14 amp hours, 190 cold cranking amps, 1.4 charging amps. Dimensions: (inches) 5-1/32 x 3-1/2 x 6-9/16; (metric -mm) 134 x 89 x 166, or similar, when setting up unit or replacing the battery.



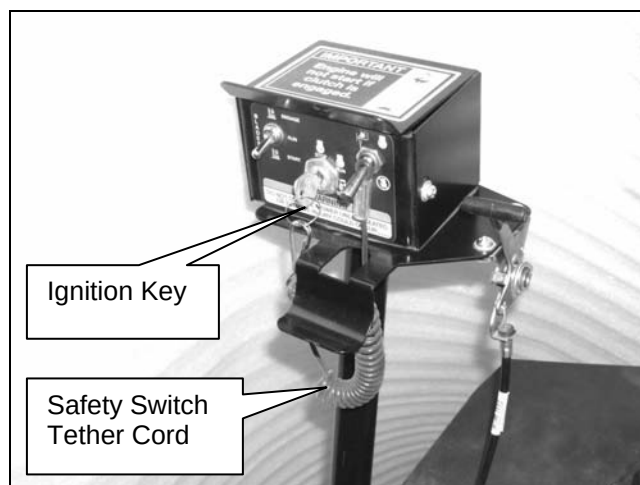
8. Check the engine for correct oil level – it was filled at the factory with the correct oil (5W30 Synthetic) – verify it by checking oil level on the dip stick! Check with the Briggs & Stratton Operator's Manual for correct oil type for operating temperature.

9. Position and attach the battery cover to the battery box. Secure battery and battery cover using two carriage bolts and flange nuts.



IMPORTANT: Always attach the negative or black cable(s) to the battery **FIRST**, then attach the positive or red cable(s) – ensure both are secure. There are two wires to both the positive and negative posts – the two negative connections have been connected together and the two positive connections have been connected together at the factory.

10. Install the Ignition Key and the Safety Tether Cord in place.



11. Inspect and check that all of the decals are in place on the Quadivator B&S 18.5 Power Unit – refer to the Parts section of this Manual for the decals and their locations.

12. Ensure the Assembly/Operators/Parts Manual is kept in a secure place so it can be given to the customer at the time of purchase and /or delivery.

IMPORTANT: Customers – keep the Operators Manual & Engine Operators Manual in a secure place for operation, reference, parts identification and purchase – when required.

3. Mounting the Power Unit to the Interframe and ATV

Please refer to the manual of the attachment being mounted for instructions on how to mount the attachment to the Power Unit/Interframe.

NOTE: Views of the ATV shown in the manual are typical. Configurations and hitch styles will vary with each unit.

3.1 Mounting of Power Unit w/o Interframe (used for Mower)

Please refer to the Operators' Manual of the Hyper-Cut Mower for instructions on mounting the Mower to the Power Unit and ATV.

3.2 Mounting of Power Unit with Interframe* (use for Snow Thrower and Brush)

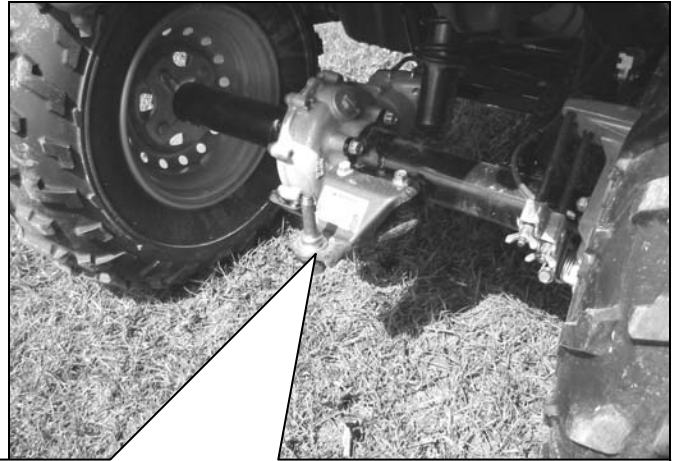
***Note:** There are two Interframes available depending on ATV, with an 8" (200mm) difference in length.

General Principles for Mounting Power Unit to ATV:

The Quadavator 18.5HP B&S PU Power Unit is to be attached to the Quadavator Interframe *first*, before attaching to the ATV:

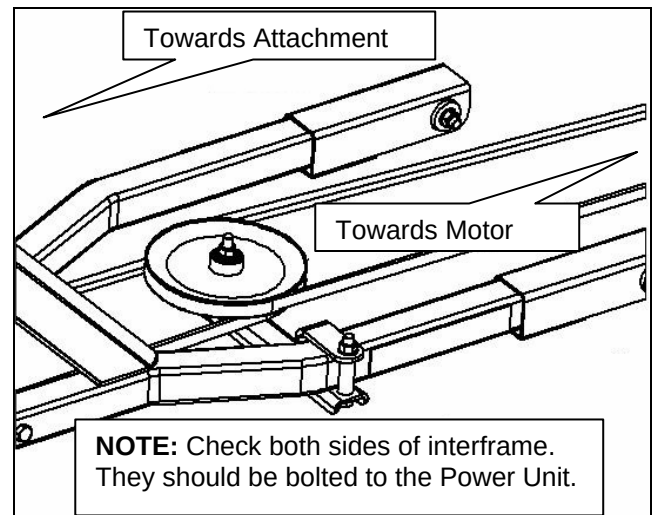
- The B&S 18.5 Power Unit/Interframe bolted assembly, is manually pushed under the ATV.
- The floating hitch - attached to the rear hitch point of the ATV - is to be horizontal after the rear of the ATV is loaded (if independent rear suspension is on your machine).
- The contact patch under the front skid pad is adjusted to the ATV – to keep the Interframe horizontal.
- Optional transport wheels are to be installed at this time.
- The Interframe is centered at the front of the ATV (left to right) & attached to the ATV with provided ratchet straps.
- The attachments are secured to the Interframe with bolts.
- Belt is attached and properly tensioned.
- Winch is attached to the hook location and lifted.

1. Install the supplied Pin – Part # 88652 in the ATV as shown – place the pin through the top and the large washer on the top of the ATV hitch. Assemble the lockwasher from the bottom and tighten the nut with a wrench or socket.



NOTE: Tighten the hitch pin securely – to 150 ft-lbs (230.5 N-m). The attachment is “pushed” by the ATV through the hitch pin, this must be secure as instructed – failure to do so will result in damage to the ATV or the attachment and/or both – or personal injury to the operator. This does not apply to models equipped with the 2” square receiver hitch.

INFORMATION: The Power Unit has a universal mount system that accommodates a 7.5-inch or taller ground to hitch height. If your ATV has a hitch height that is between 7.0” to 7.5” (measured from the ground on hard surface - to the top of the ATV hitch) it is still possible to mount the Interframe & attachment to your ATV.

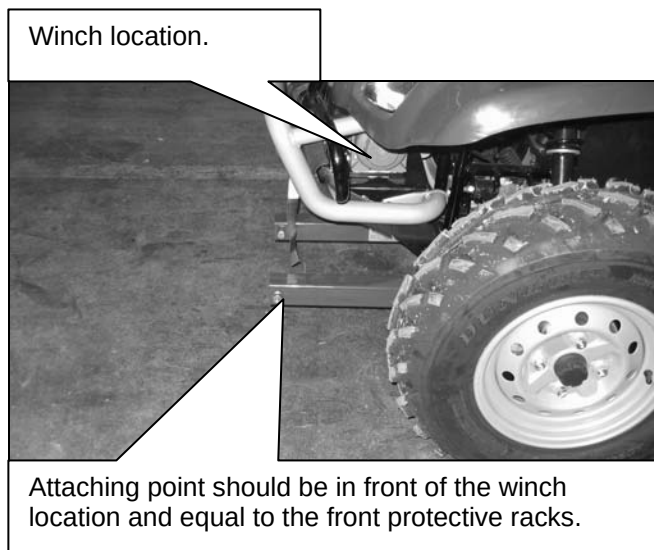
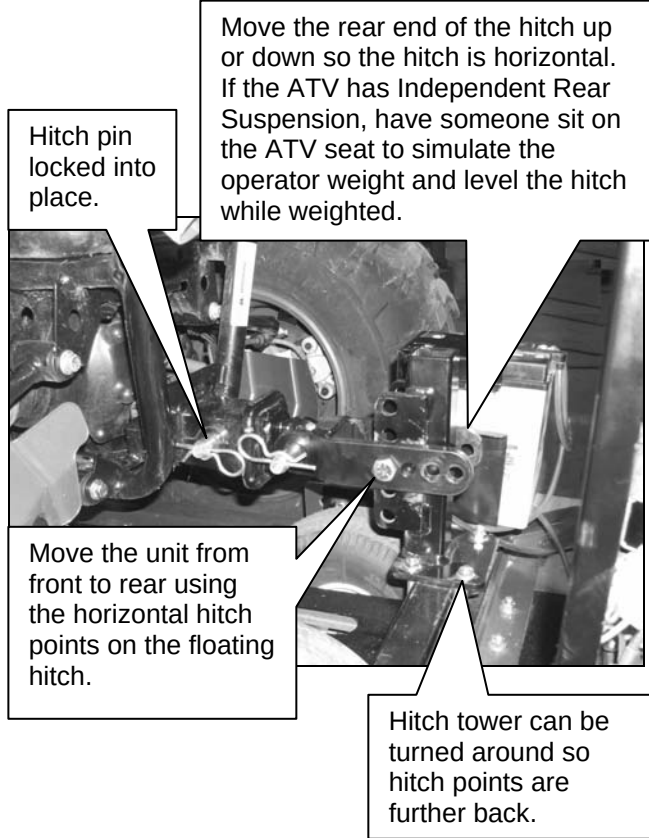


2. Join the Interframe to the Power Unit - Insert the tubes of the Power Unit into the matching brackets on the Interframe with the provided locking hardware

3. Push the assembled Power Unit & Interframe into place under the ATV from the rear of the ATV.

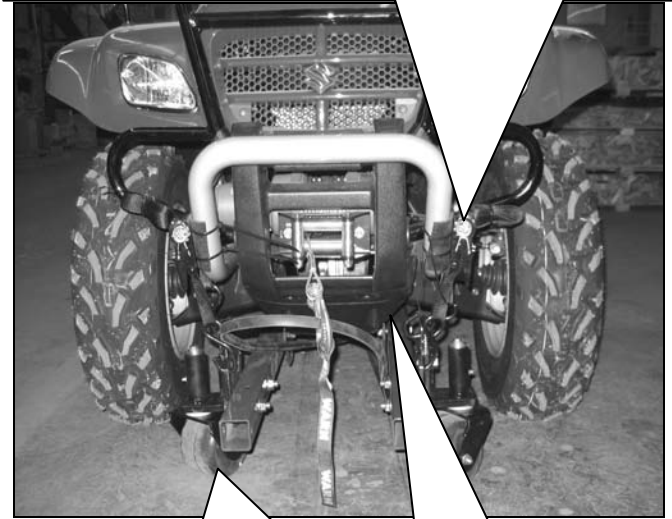
4. Attach the rear hitch to the pin on the rear of the ATV and lock it in place with the lock pin – inserted through the hitch pin.

5. Adjust the floating hitch to horizontal position and adjust longitudinally (with the hitch pin) so that the front end of the Interframe is in front or just above the winch location.



6. Attach the Power Unit/Interframe assembly to the ATV front loosely with the ratchet straps provided in the Interframe Package.

NOTE: Ratchet strap looped around the front frame to secure the Interframe to the ATV. Ratchet straps are required on both sides of the ATV.



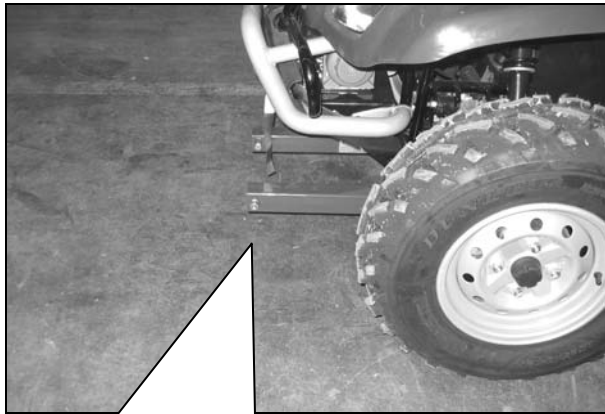
NOTE: Optional transport wheels –install as shown! They should be adjusted to be 19mm (3/4") off the ground with no load on the front of the ATV. Refer to 86343 Instructions that are in kit.

NOTE: The skid contact patch in place between the front suspension of the ATV – this should be a structure solid part of the ATV frame.

Check that the Interframe contact is correctly centered (left to right) and that the skid plate contact is adjusted both forward & rear. It should contact the ATV skid pad or a solid frame location right between the front suspension connections points. The following adjustments may be required:

- Correct adjustment may require moving the contact patch on the holes provided in the Interframe sides.
- Height adjustment (of the front attaching point) may require adjusting the skid plate contact to the ATV to get the front contact hole to 6.5" from the ground surface.

Important: Find a secure point of attachment for the ratchet strap that does not touch or affect the drive belt operation, and the operation of the power winch.



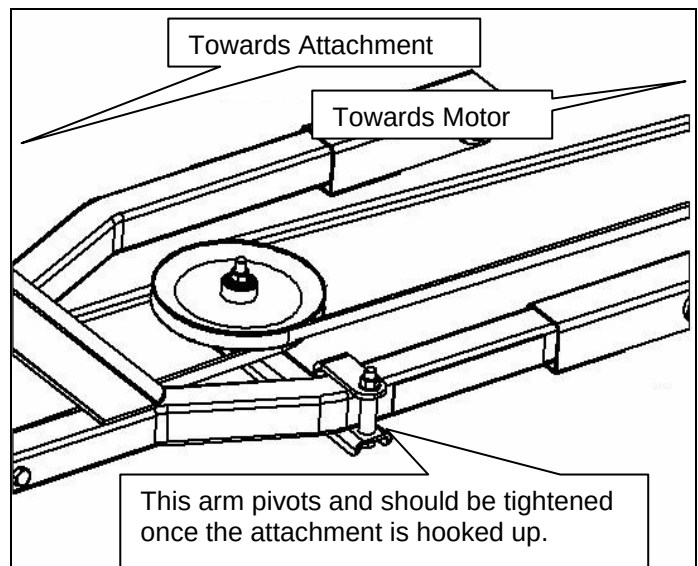
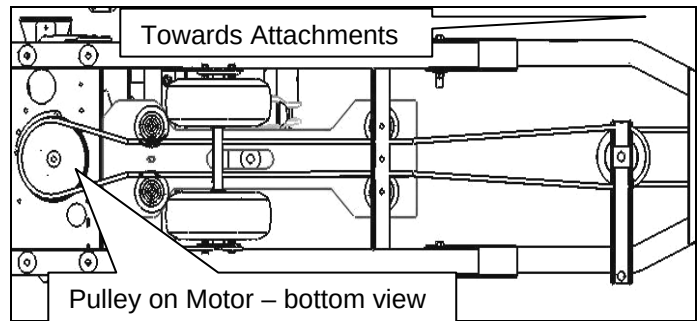
This distance from the frame to the ground is adjusted to 6.5 inches (165mm) by moving the center contact to the ATV frame or skid plate.

7. Ratchet the Interframe securely to the ATV – the Interframe contacts the ATV only at the hitch point and at the skid pad, held in place with the ratchet straps.

IMPORTANT: DO NOT allow the excess nylon ratchet strap material to hang loosely in the front of the ATV, there will be a belt powering the snow thrower and you must not allow the nylon strap to get into the belt drive. If they do contact, there may be significant damage to the ratchet strap, the belt and/or the operator of the ATV.

8. The two (2) drive belts should be installed at this time.

- *First*, the belt from the lower pulley on the Interframe to the front of the ATV,
- *Then*, the belt which connects the Interframe from the upper pulley to the motor. Loop the attachment belt and hook into winch hook so it is held up before attaching to attachment.



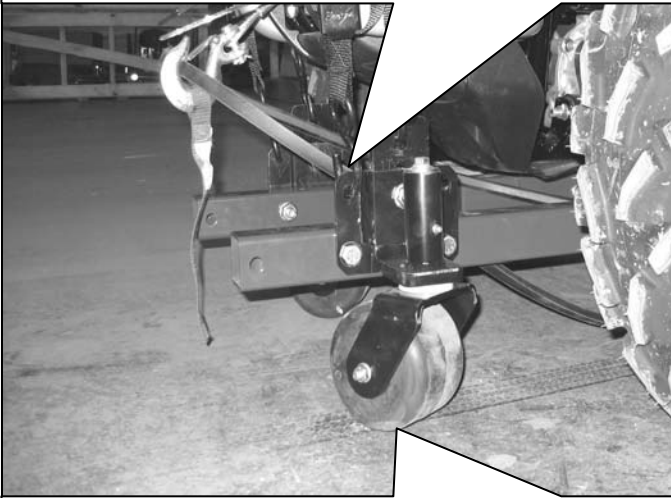
This arm pivots and should be tightened once the attachment is hooked up.

9. The ATV with the attached Power Unit/Interframe – can be driven if required to maneuver to the Quadivator Attachment. Operate the ATV & Power Unit Assembly around in the area at speeds not over 5 mph (or 8 kph) to ensure that the connections are secure and nothing has moved or shifted in the attaching points.

10. Install Optional Transport Castor Wheels (if so equipped) at this time, bolt the holders to the Interframe and adjust them with the provided pin to keep them 19mm (3/4") above the ground surface when the front suspension is unloaded.

Refer to the instructions provided with the kit to the install the Transport Castor Wheels (Part # 86343).

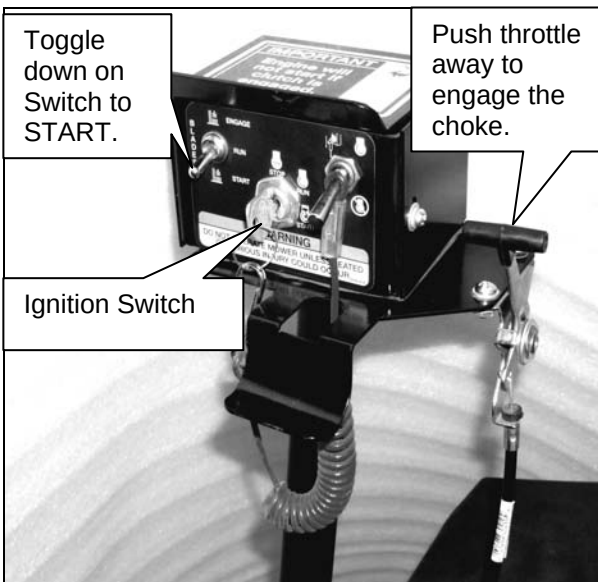
Adjustment can be done with holes in the transport casters.



This distance to the ground is adjusted – from the bottom of the wheels) to $\frac{3}{4}$ inch (19 mm) when the front end of the machine is unloaded.

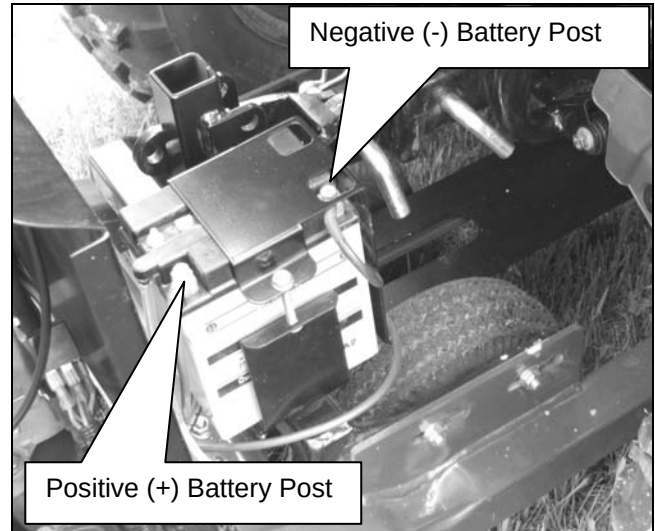
3.3 Initial Start Up of the Quadivator Power Unit

1. Fill the fuel tank of the power unit partially with gasoline – regular unleaded.
2. Turn the fuel shut off valve to the down position to allow fuel to flow to the engine – it is located under the fuel tank.
3. Check oil level in the engine and bring to spec!



4. Ensure the tether cord is in place – the engine will not start without an electrical contact through this switch.

5. Ensure that the battery is correctly installed and the battery cables are securely and correctly attached to the battery posts.



6. Move the throttle completely away from the operator to engage the choke.

7. Move the toggle switch to start.

8. Insert and turn the key to the start position.

9. Once the engine “fires” or starts - reduce throttle to “take off” the choke from the engine.

10. Allow the engine to warm up to operating temperature before engaging the attachment for the first time.

11. Shut the engine off and check all drives for operation!

12. Restart the engine of the Power Unit and starting using with attachment.

4. Operation – Power Unit

The Quadivator Power Unit mounted to an ATV is designed to operate Quadivator Attachments, such as the Power Brush, Snow Thrower, Mower or other powered Quadivator Attachments that are available. For complete operating instructions, please refer to the Quadivator Attachment manual.



WARNING:
Use only Quadivator Attachments specifically designed to fit the Power Unit. Failure to do so can cause bodily harm and damage the Power Unit.



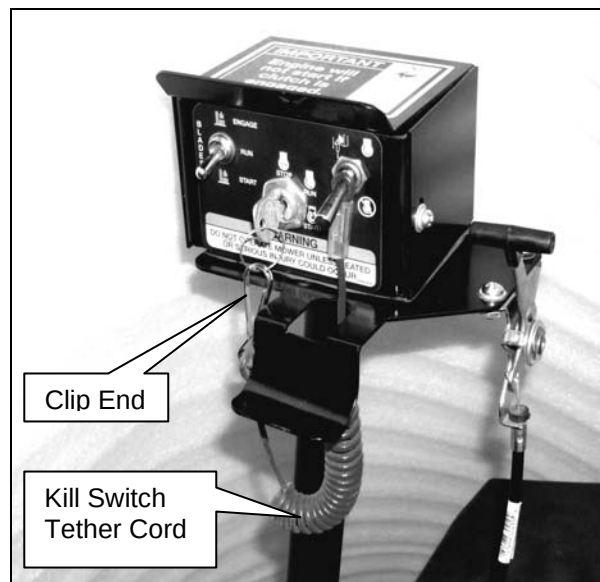
WARNING:
The Power Unit should be attached to the ATV as described in this manual. Mount and adjust the attachments as described in the supplied manuals for each specific Quadivator Attachment.



CAUTION:
Learn all controls and how they work. Read the complete Power Unit Operators Manual and related Quadivator Attachment.

Keep the Power Unit engine running at full throttle for the best operating results. Control forward travel speed by the ATV forward speed. Do NOT go faster than the recommended speed for each Quadivator attachment. The ATV overall length has been increased with the Quadivator. Allow additional clearance for the implement to swing when turning.

WHEN IN USE: Always attach the clip end of the Tether Cord to your belt, until you dismount from the ATV. The switch the cord is attached to will shut off the engine if pulled deliberately or by inadvertent dismount from the ATV seat.



Refer to the Briggs & Stratton Engine Operator's Manual for servicing and lubrication specifications and their recommended intervals.

NOTE: Electrical Schematic is provided on page 22 of the Operators Manual as a reference or for troubleshooting.

Battery Specifications:

Type: YB14-A2, 12 volts, 14 amp hours, 1.4 amps.
Dimensions (L, W, and H) or similar:
- Inches: 5-1/32 x 3-1/2 x 6-9/16:
- Metric (mm): 134 x 89 x 166.

5. Maintenance

1. Service Intervals

Item #	Check Point	Use Hour Interval (change or check every interval)			
		Check Daily	50 Hours or Weekly	Annually	Manual Reference Page
1	Check all hardware - Tighten and/or torque to spec.	x			
2	Check Drive Belt Tension	x			
3	Check Engine Oil Level	x			
4	Check security of Hitch Pin - located on ATV hitch	x			
5	Ensure Hitch Security Pin is in place - through the ATV hitch pin	x			
6	Remove any debris build up on engine cooling air intake.	x			
7	Shut Fuel OFF after usage season is over. NOTE: Fuel valve located beneath the fuel tank.	x			
8	Do a general Engine Check - includes the air filter. Refer to B&S Engine Operators' Manual.		x		
9	See the engine manufacturer recommendations for servicing.		x	x	
10	Check Drive Belts for physical wear			x	

2. Storage of the Power Unit



DO NOT store the Power Unit indoors in a poorly ventilated area. Keep away from gas appliances where fumes could contact open flame, pilot lights or sparks.

If the Quadivator Power Unit is to be stored for more than 30 days, prepare the unit as follows:

1. Drain fuel outside into an approved container – OR leave the fuel valve on the gas tank in the OFF (down) position, then start the engine.
2. Start the engine and run until the unit is out of fuel. Refer to the engine operators' manual for further storage information.
3. Let the engine cool.

4. Remove the remaining gasoline from the carburetor to prevent gum deposits from forming within the engine. Gum deposits can cause malfunction in the engine and fuel system.

5. Remove battery from unit and store in a cool, dry place during storage. Check battery charge and bring to spec. Clean all battery connections and posts before installing battery to Power Unit. If battery does not hold charge, replace with type YB-14-A2 (or similar). 12 Volts: 14 Amp Hrs: 190 cold cranking amps. Measurements (LxWxH) (inches): 5-1/32 x 3-1/2 x 6-9/16.or similar.

NOTE: Do not store battery on concrete, but place on a piece of wood larger than the battery size. This will slow battery discharge. Maintain full charge while battery is in storage. Store the battery where electrolyte will not freeze.

3. Torque Tightening Chart

The Torque Tightening Chart is to be used to ensure that the hardware used on the Quadivator Product is tightened to the capacity of the hardware.

Use the Torque Tightening Chart to make sure that the hardware on your Quadivator Product is secure.

American Standard Cap Screws with UNC or UNF Threads			Metric Cap Screws			
SAE Grade No.	Grade 5 – 	Grade 8 – 	Property Class		Class 8.8 – 	Class 10.9 – 
(ft-lbs)	17 - 20.5	24 - 29	M8	(ft-lbs)	17.4 - 20.2	21.7 - 25.3
5/16 (N-m)	23.1 - 27.8	32.5 - 39.3		(N-m)	23.6 - 27.4	29.4 - 34.3
(kgf-m)	2.35 - 2.84	3.31 - 4.01		(kgf-m)	2.4 - 2.8	3.0 - 3.5
(ft-lbs)	35 - 42	45 - 54	M10	(ft-lbs)	35.5 - 41.2	44.9 - 52.1
3/8 (N-m)	47.5 - 57.0	61.0 - 73.2		(N-m)	48.1 - 55.8	60.8 - 70.5
(kgf-m)	4.84 - 5.82	6.22 - 7.47		(kgf-m)	4.9 - 5.7	6.2 - 7.2
(ft-lbs)	80 - 96	110 - 132	M12	(ft-lbs)	57.2 - 66.5	76.0 - 86.8
1/2 (N-m)	108.5 - 130.2	149.2 - 179.0		(N-m)	77.5 - 90.1	103 - 117
(kgf-m)	11.07 - 13.29	15.22 - 18.27		(kgf-m)	7.9 - 9.2	10.5 - 12.0
(ft-lbs)	110 - 132	160 - 192	M14	(ft-lbs)	91.2 - 108	123 - 144
9/16 (N-m)	149.2 - 179.0	217.0 - 260.4		(N-m)	124 - 147	167 - 196
(kgf-m)	15.22 - 18.27	22.14 - 26.57		(kgf-m)	12.6 - 15.0	17.0 - 20.0
(ft-lbs)	150 - 180	220 - 264	M16	(ft-lbs)	145 - 166	192 - 224
5/8 (N-m)	203.4 - 244.1	298.3 - 358.0		(N-m)	196 - 225	260 - 303
(kgf-m)	20.75 - 24.91	30.44 - 36.53		(kgf-m)	20.0 - 23.0	26.5 - 31.0

6. Troubleshooting – Power Unit

Problem	Probable Cause	Correction
Engine will not crank/start.	1. Fuel Tank is Empty	1. Fill the fuel tank.
	2. Fuel shut off valve closed	2. Open the fuel shut off valve.
	3. Build up of dirt & residue around governor and carburetor.	3. Clean the area around the governor and carburetor.
	4. Toggle Switch is not in the START Position.	4. Move the toggle Switch to Start Position.
	5. Kill switch in OFF Position.	5. Move Kill switch to ON Position.
	6. Ignition Switch starter circuit not functioning.	6. Check for bad starter or improper electrical connections.
	7. Battery Discharged, wires or connection loose.	7. Load test battery & replace after verifying the connections are good.
Engine Stops	1. Out of fuel	1. Fill the fuel tank.
	2. Fuel shut off valve - Closed	2. Open the fuel shut off valve.
	3. Mechanical Jam in the attachment.	3. Turn off the engine, remove key, wait for all moving parts to stop. Check for and remove obstruction. Check and repair the attachment and power unit before re-start.
	4. Polluted fuel supply.	4. Replace with clean fuel, clean fuel system.
	5. Faulty spark plug	5. Clean or replace spark plug.
	6. Kill Switch moved to OFF Position.	6. Move Kill switch to ON Position.
Engine Problems	1. See Engine Operation & Maintenance Manual – supplied with Power Unit.	
Belt Wears Too Fast or Breaks Prematurely	1. Belt guide pulleys loose or misaligned	1. Adjust belt guide pulleys
	2. Belt tension is loose.	2. Adjust belt tension.
	3. Idlers misaligned or loose.	3. Check Idler alignment and for looseness.

7. Replacement Parts

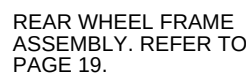
The following pages contain parts illustrations and replacement part numbers for all components for the Quadivator B&S 18.5PU Power Unit. At the time of printing, some of the minor parts in the manual may become outdated.

To obtain replacement parts, please contact your Quadivator for service. To locate the nearest dealer, please contact a Quadivator Representative, using the contact information at the beginning of the manual.

When ordering parts – have the following information on hand:

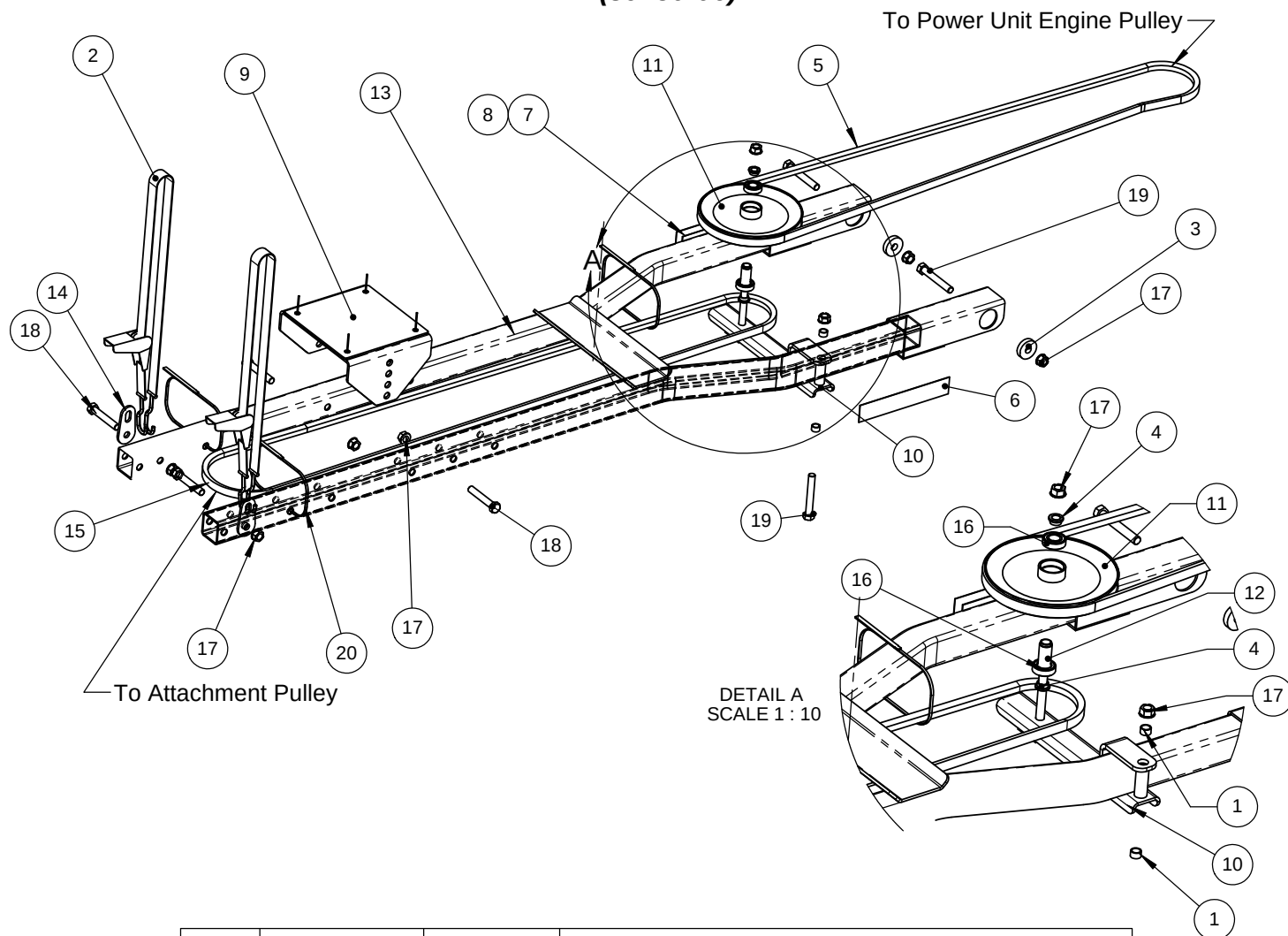
- *Part Number you are looking for.*
- *Model Number and Serial Number of machine.*
- *Quantity required.*

To ensure warranty support for your Quadivator, please fill out the Warranty Registration Card located in the Operators Manual.



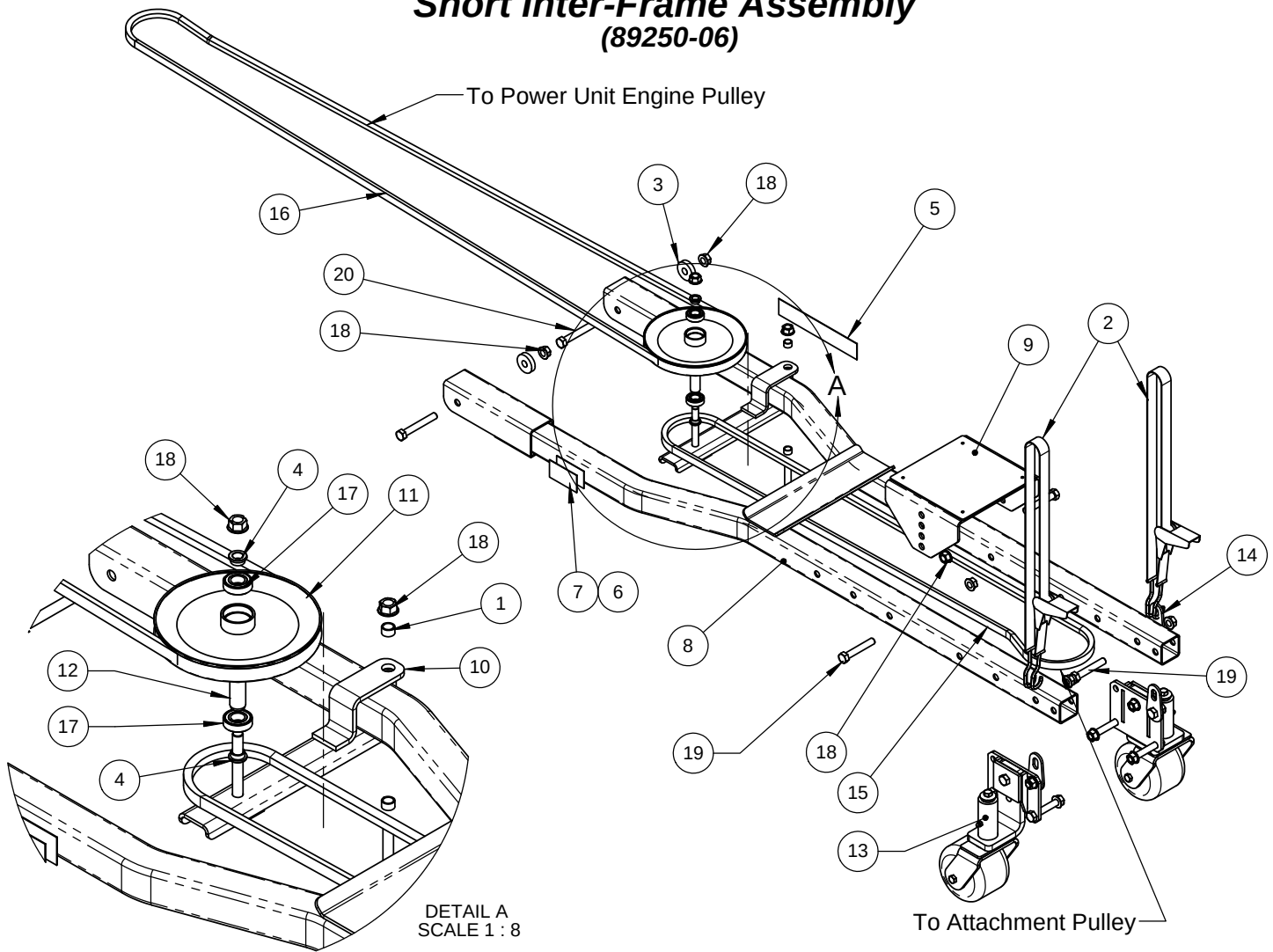
ITEM	88100-08 /QTY.	PART	DESCRIPTION
1	1	87330B	Weldment - Engine Base Plate, Briggs-06
2	1	88110B	Weld't -Rear Frame -06
3	1	88135A	Plate - Motor Shield-06
4	1	88166	Tab, Ground
5	1	88266B	Shield - Rear Frame
6	1	88285	Weld't -Hitch Tower
7	1	88304	Battery Box -06
8	1	88306	Battery Cover -06
9	1	88307	Plate Battery Box Retainer
10	1	88309	Spacer - Clutch
11	1	88380A	Weldment - Bracket, Hitch-06
12	1	88506	Clutch, Warner Electric
13	1	88508	Engine, Briggs & Stratton -18.5 HP
14	1	88530B	Sub Assy -Tank Stand-06
15	8	88531	Tube -Bearing Spacer -Castor
16	1	88544	Relay, w/ Mt Bracket-12V SPST
17	4	88574	Idler Pulley - 3"
18	1	88596	Decal, Warning - Avoid Serious Injury
19	2	88599	Decal, Warning-Keep Hands Clear
20	2	88613A	Decal, Model - B&S 18.5
21	1	88646	Belt -B225
22	1	88652	Pin, Link - Cat 0
23	1	88653	Pin, Klik -1/4 x 1 3/8 Round
24	1	88664	Decal - Oil
25	1	88665	Decal-Quadvator Corp-1.75 x 8.5"
26	1	88666	Decal - Serial Plate Foil (1 5/8 x 3.00")
27	1	88667	Decal - Mylar Overlay, Frosted
28	1	88724	Wire Assy - Solenoid -Ground
29	1	88733	Wire Assy - Solenoid to Starter
30	1	88734	Wire Assy - Batt + to Ground
31	1	88738	Battery, Type: YB14-A2 (not supplied)
32	1	88744	Solenoid, DC - Trombetta
33	1	88756	Relay, w/ Mt Bracket-12V SPDT
34	1	88760	Wire Assy - Batt + to Ground
35	1	88800B	Assy -Rear Wheel Frame -06
36	2	CB.25X.625	Carriage Bolt 1/4 x 5/8 gR 5
37	2	CB.25x2	Carriage Bolt, 1/4 x 2
38	2	CB.313X2.5	Carriage Bolt, 5/16 x 2 1/2
39	4	CB.438x3	Carriage Bolt 7/16 x 3
40	1	CTS1.5X1.5	Tube Cap, square, 1.5 x 1.5 x (.083-.134)
41	5	FHN.25	Flange Lock Nut-1/4 NC Uitorque
42	12	FHN.313	Flange Lock Nut, Uitorque 5/16 NC
43	13	FHN.375	Flange Lock Nut-3/8 NC Uitorque
44	1	FHN.5	Flange Lock Nut-Uitorque -1/2-13NC
45	4	FW.438	Flat Washer 7/16 Std
46	3	FW.625N	Flat Washer 5/8 SAE
47	1	HB.25x.75	Hex Head Bolt 1/4-20 X 3/4
48	2	HB.313x.75	Hex Head Bolt 5/16-18 X 3/4
49	4	HB.313x1.5	Hex Head Bolt 5/16-18 X 1 1/2
50	1	HB.375x.75	Hex Head Bolt 3/8-16 X 3/4
51	8	HB.375x1	Hex Head Bolt 3/8-16 X 1
52	4	HB.375x2	Hex Head Bolt 3/8-16 X 2
53	2	HB.375x4FT	Hex Head Bolt 3/8-16 X 4 Full Thread
54	1	HB.438x2.5NF	Hex Head Bolt 7/16-20 NF X 2 1/2
55	1	HB.5x3.5	Hex Head Bolt 1/2-13 X 3 1/2
56	2	HN.375	Hex Nut 3/8-16 UNC
57	4	HN.438	Hex Nut 7/16-11 NC
58	1	HN.625	Hex Nut 5/8-11 NC
59	2	HWHTCS#10x.5	Hx Wshr Hd Thrd Cut (Tek)screw-#10 x 1/2
60	5	LW.438	Lockwasher-7/16"
61	1	LW.625	Lockwasher-5/8
62	2	UBS.313X1.563X2.25	U-Bolt, Square, 5/16 x 1 1/5 x 2

Long Inter-Frame Assembly (89450-06)



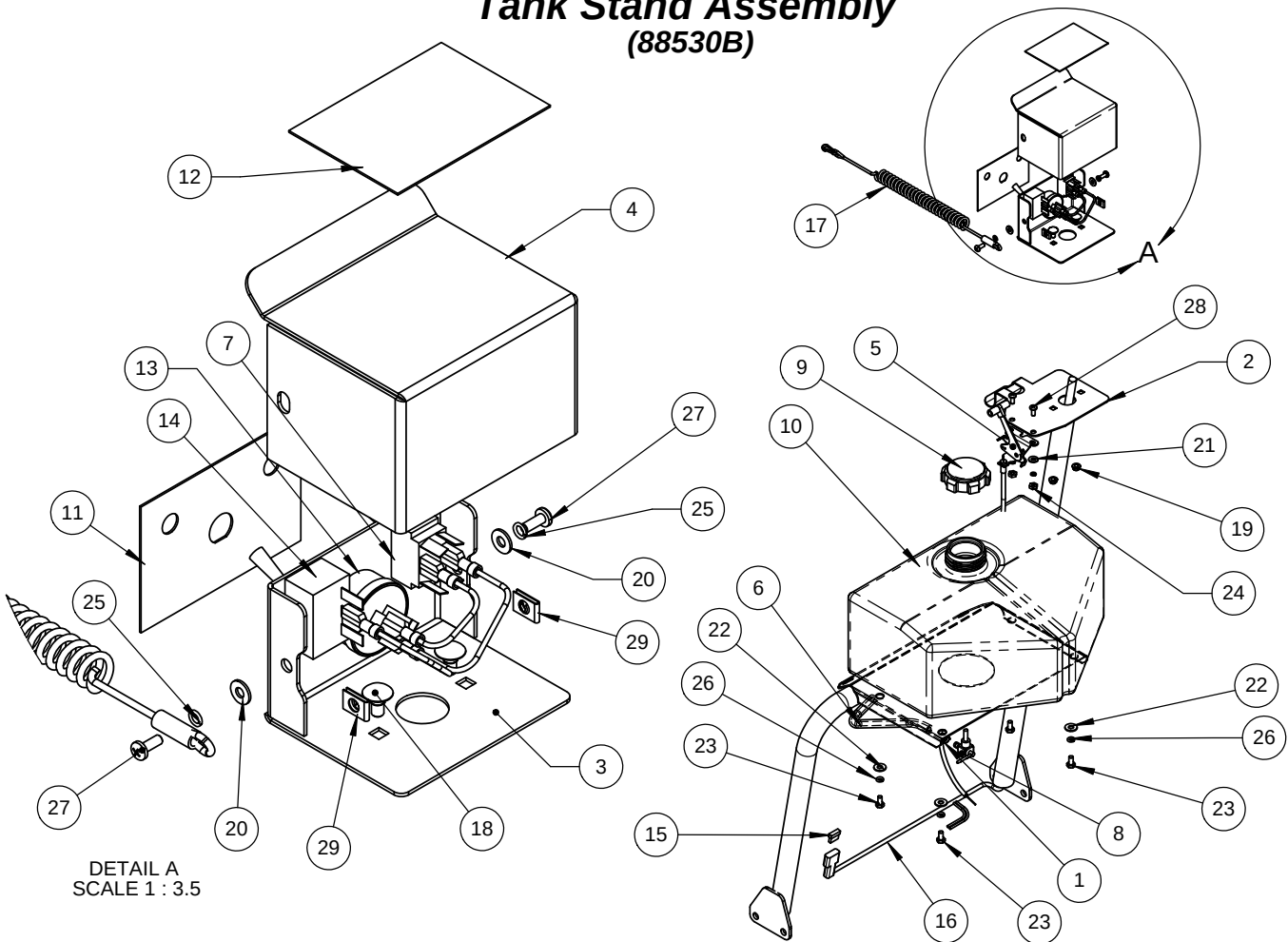
ITEM	89450-06/QTY.	PART	DESCRIPTION
1	2	19-5-91	Bushing -Oilite 12.7ID x 16OD x 9.4 Long
2	2	86803	Ratchet Strap -05500 1 x 6
3	2	88403	Washer - Retainer
4	2	88545	Spacer - Bushing
5	1	88645	Belt B225 - Blower Drive
6	1	88665	Decal-Quadvator Corp-1.75 x 8.5"
7	1	88666	Decal - Serial Plate Foil (1 5/8 x 3.00")
8	1	88667	Decal - Mylar Overlay, Frosted
9	1	89245	Assembly - Bumper Pad
10	1	89290	Weld't - Pulley Mount Swing Arm
11	1	89315B	Pulley -Double Idler Weld't -4.5&8
12	1	89318	Bushing -Spacer -Dbl Pulley
13	1	89440	Weldment - Inter-Frame-Long
14	2	89442	Lug, Ratchet Strap Base
15	1	89545	V Belt- B136, Kevlar
16	2	89824	Bearing 6003-2RS-AAB
17	8	FHN.5	Flange Lock Nut-Unitorque -1/2-13NC
18	4	HB.5x3	Hex Head Bolt 1/2-13 X 3
19	3	HB.5x3.5	Hex Head Bolt 1/2-13 X 3 1/2
20	3	LCT.04x11	Tie Wrap .04 x .17 x 11 in 35 Lbs-Black

Short Inter-Frame Assembly (89250-06)



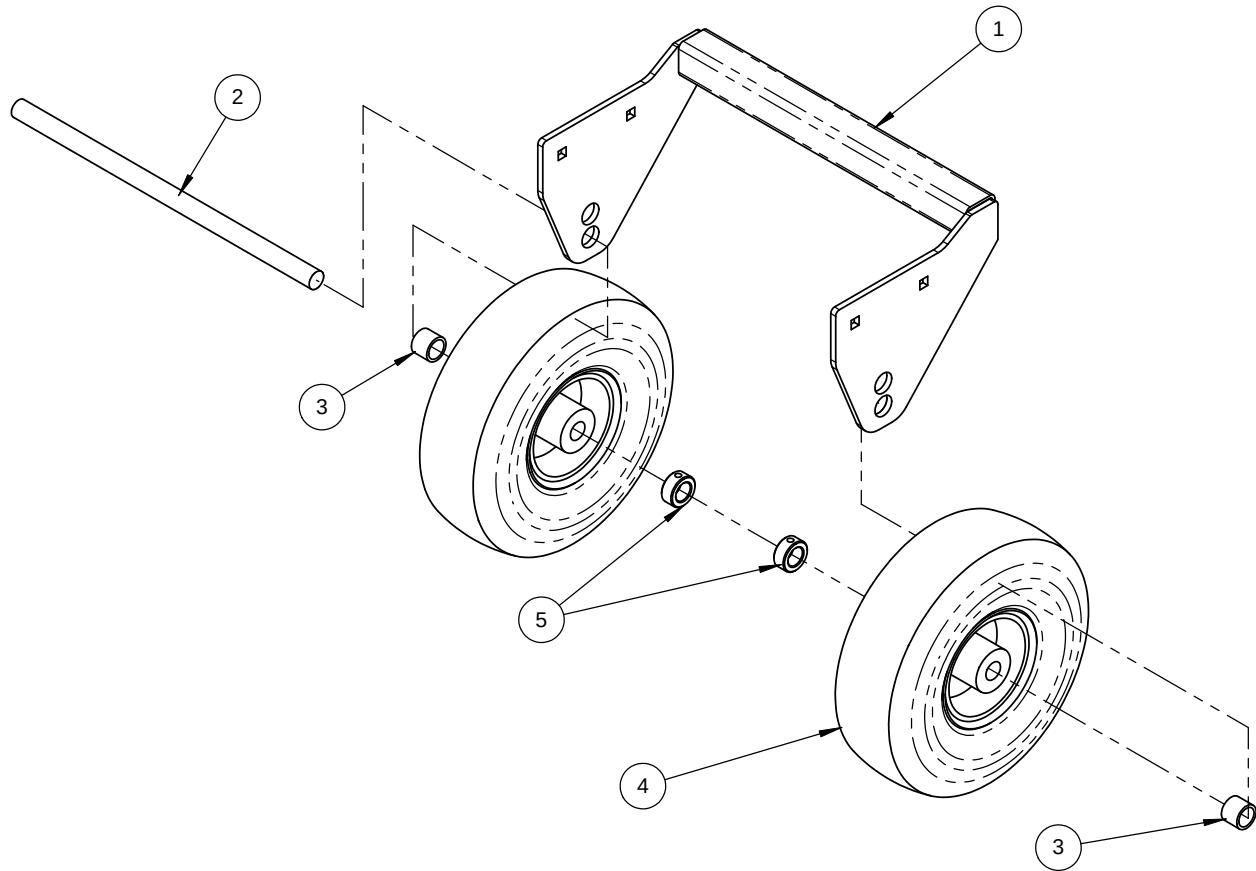
ITEM	89250-06/QTY.	PART	DESCRIPTION
1	2	19-5-91	Bushing -Oilite 12.7ID x 16OD x 9.4 Long
2	2	86803	Ratchet Strap -05500 1 x 6
3	2	88403	Washer - Retainer
4	2	88545	Spacer - Bushing
5	1	88665	Decal-Quadivator Corp-1.75 x 8.5"
6	1	88666	Decal - Serial Plate Foil (1 5/8 x 3.00")
7	1	88667	Decal - Mylar Overlay, Frosted
8	1	89240A	Weldment - Inter-Frame, short
9	1	89245	Assembly - Bumper Pad
10	1	89290	Weld't - Pulley Mount Swing Arm
11	1	89315B	Pulley -Double Idler Weld't -4.5&8
12	1	89318	Bushing -Spacer -Dbl Pulley
13	1	89350	Kit- Single Caster Wheel Assy
14	1	89442	Lug, Ratchet Strap Base
15	1	89523	V Belt -B116, Kevlar (USA) (4404)
16	1	89530	V Belt -B133, Kevlar(7-8727)
17	2	89824	Bearing 6003-2RS-AAB
18	8	FHN.5	Flange Lock Nut-Unitorque -1/2-13NC
19	3	HB.5x3	Hex Head Bolt 1/2-13 X 3
20	3	HB.5x3.5	Hex Head Bolt 1/2-13 X 3 1/2
21	3	LCT.04x11	Tie Wrap .04 x .17 x 11 in 35 Lbs-Black

Tank Stand Assembly (88530B)



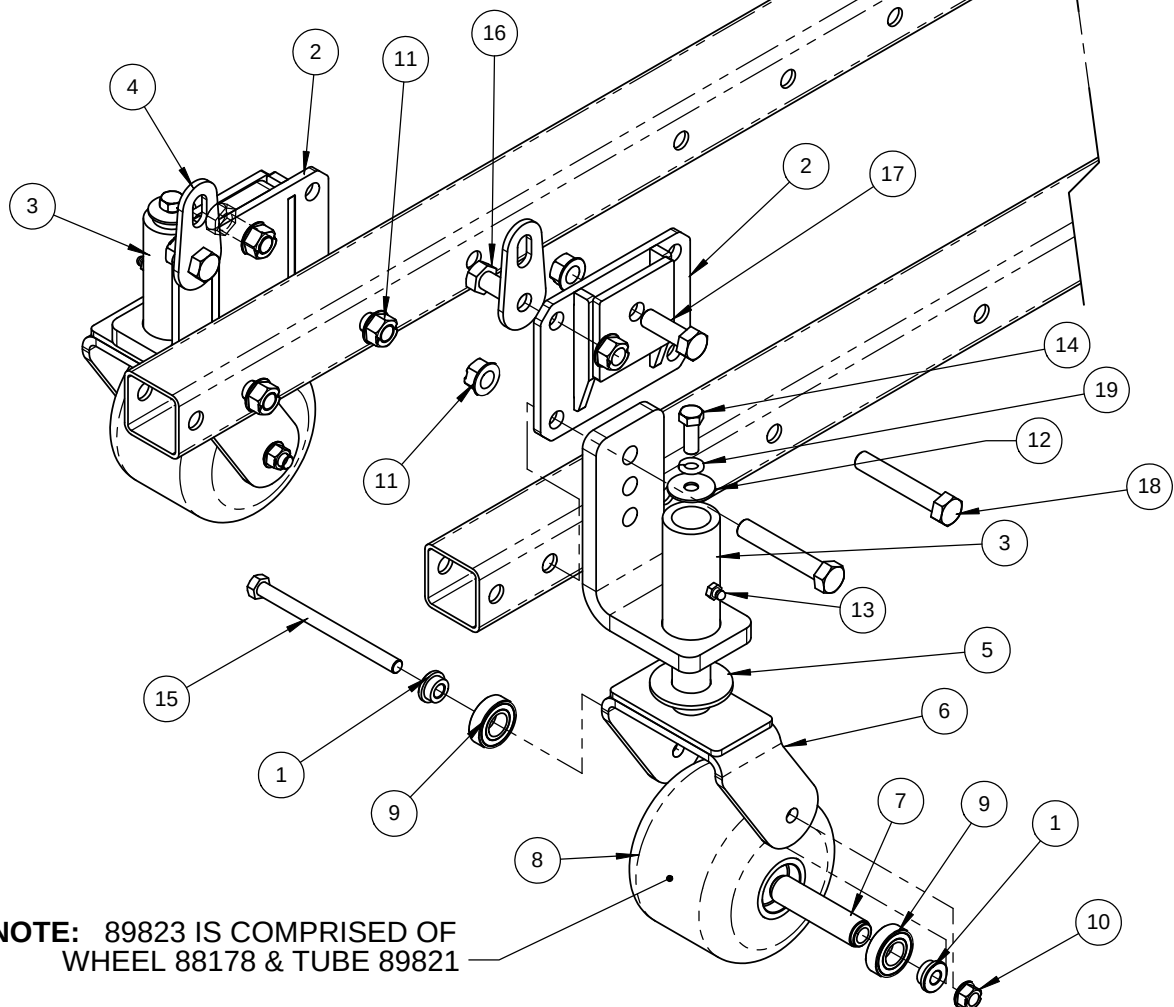
ITEM	QTY	PART	DESCRIPTION
1	2	10088	Clamp - Hose, Spring Grip 1/2"
2	1	88360B	Weld't-Tank stand, 06
3	1	88401B	Base - Control Box-06
4	1	88402A	Cover -Control Box -05
5	1	88514	Throttle Cable Assembly -(29")
6	1	88518	Hose - Gasoline, Tank to Engine
7	1	88543	Switch, Toggle - DPDT
8	1	88583	Valve - Fuel, Dapco
9	1	88584	Cap - Fuel, Kelch Utility
10	1	88585	Tank - Gasoline, 12.5L
11	1	88606A	Decal - Control Box Face Plate -05
12	1	88608	Decal, Control Top
13	1	88654	Switch, Ignition - Keyed Indak # 3J463A
14	1	88656	Switch, 2 Position - Toggle Indak # 2E219
15	1	88659	Fuse, 10A - Automotive Bayonet
16	1	88723A	Harness, Main Wiring - 06 Power Unit
17	1	88743	Ass'y, Lanyard - Power Unit, 58"
18	2	CB.25x.5	Carriage Bolt 1/4 x 1/2 GR 5
19	2	FHN.25	Flange Lock Nut-1/4 NC Uunitorque
20	2	FW#10	Flat Washer # 10
21	2	FW#12	Flat Washer # 12
22	4	FW.25	Flat Washer - 1/4 Standard
23	4	HB.25x.5	Hex Head Bolt 1/4-20 X 1/2
24	2	HN#12	Hex Nut, #12-24 UNC Plated
25	4	LW#12	Lockwasher-#12
26	4	LW.25	Lockwasher-1/4
27	2	MSPH10-24x.5	Screw, Machine Pan Head #10-24 x 1/2
28	2	MSPPH#12x.5	Screw, Machine Phillips Pan Head #12-24 x 1/2
29	2	UN#10-24	Nut, U type Clip, #10-24 (Tinnerman)

Rear Wheel Frame Assembly (88800B)



ITEM	88800B/QTY.	PART	DESCRIPTION
1	1	88270A	Weld't, Rear Wheel Frame-06
2	1	88282	Shaft - Rear Wheel Axle
3	2	88301	Tube - Spacer
4	2	88535	Assembly - Pneumatic Hub & Wheel
5	2	88647	Collar 3/4 in. w/ SS

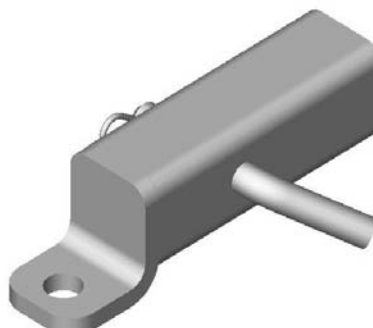
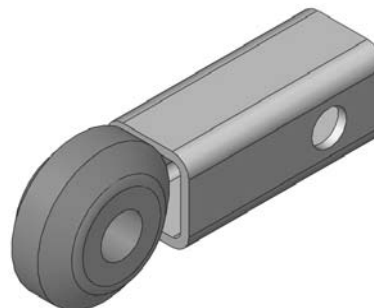
Wheel Assembly (Optional) (89350)



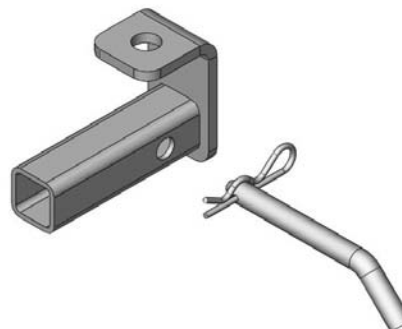
ITEM	Default/QTY.	PART	DESCRIPTION
1	4	88540	Spacer - Bushing
2	2	89320	W.A. - Bracket, Caster
3	2	89325	W.A. - Leg, Interframe Caster
4	2	89442	Lug, Ratchet Strap Base
5	2	89753	Washer - Caster
6	2	89765	W.A. - Caster Wheel Mount
7	2	89822	Tube -Bearing Spacer -Castor
8	2	89823	Assy-Rubber Wheel
9	4	89824	Bearing 6003-2RS-AAB
10	2	FHN.375	Flange Lock Nut-3/8 NC Unitorque
11	8	FHN.5	Flange Lock Nut-Unitorque -1/2-13NC
12	2	FNW.375x1.25	Flt Fndr Wshr 3/8"IDx1.25"ODx.06Thick
13	2	GZ.25	Grease Zerk 1/4-28 Straight
14	2	HB.375x1	Hex Head Bolt 3/8-16 X 1
15	2	HB.375x5	Hex Head Bolt 3/8-16 X 5
16	2	HB.5x1	Hex Head Bolt 1/2-13 X 1
17	2	HB.5x1.5	Hex Head Bolt 1/2-13 X 1 1/2
18	4	HB.5x3	Hex Head Bolt 1/2-13 X 3
19	2	LW.375	Lockwasher-3/8

Optional Hitches for ATVs**Part # 86552, Kit - Receiver Hitch, Arctic Cat 2x2**

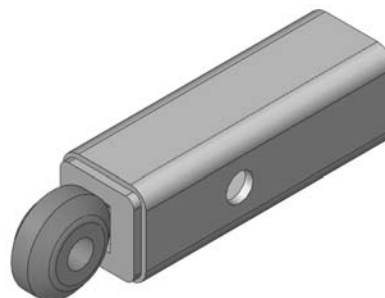
- Includes 86618 Pin (5/8 dia.) and Hair Pin HPC.125x2.563

**Part # 88415, Weldment, Receiver Hitch 1.25" (Mule)****Part # 88440, Assembly - Polaris Hitch (1.25 Sq)**

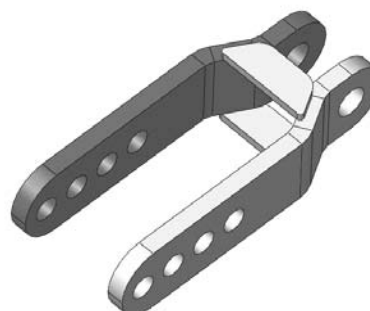
- Includes 89209 1/2" Pin and Hair Pin HPC.125x2.563

**Part # 88375, Weldment - AC Hitch Rec. Tube (2" Sq w/5/8 Hole)**

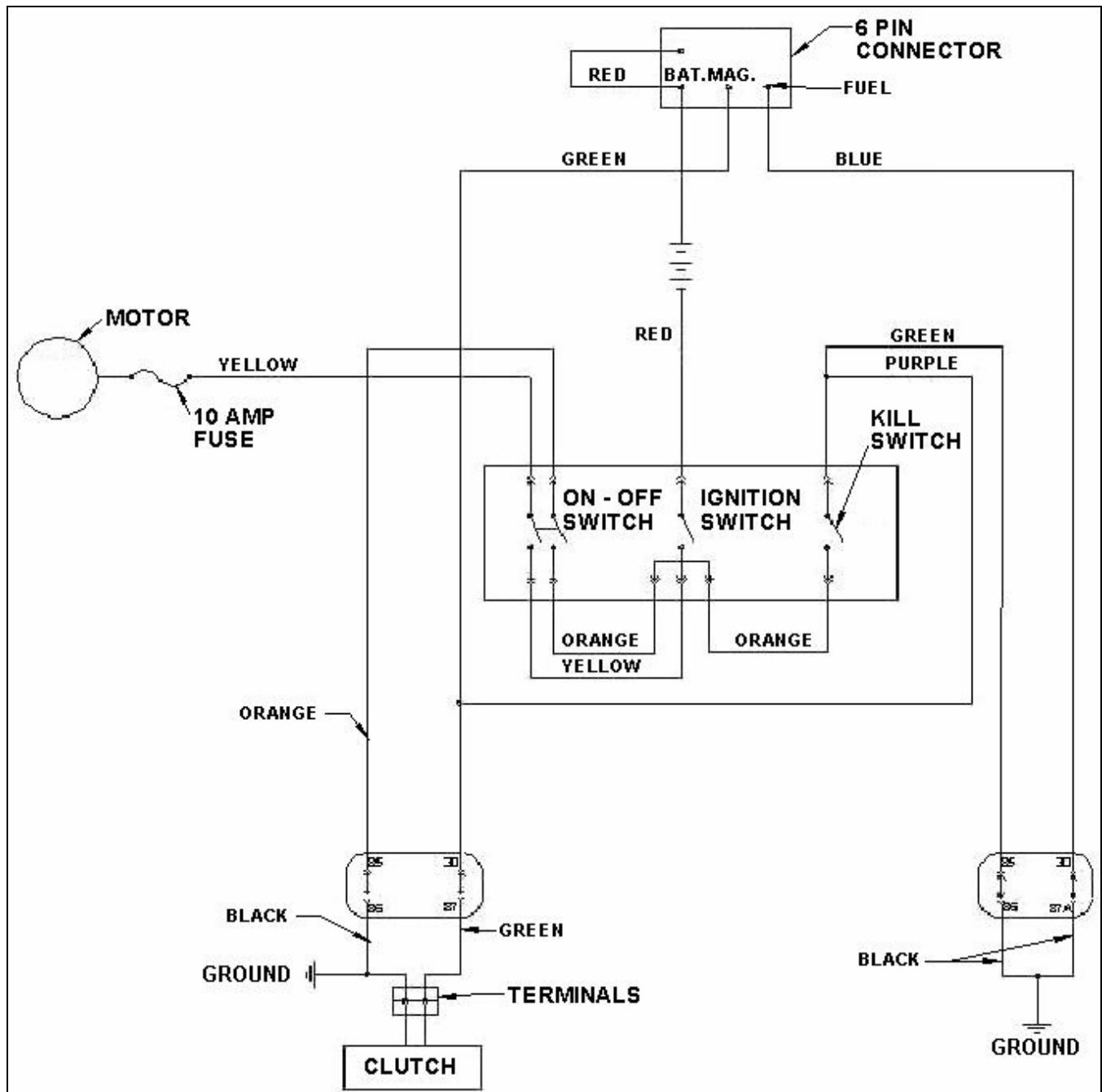
- Use with 88390 to attach Power Unit

**Part # 88390, Weldment - Hitch Bracket -AC**

- Use with 88375 to connect Power Unit to Arctic Cat Quad.



Power Unit PU 08 – Electrical Schematic



WARRANTY REGISTRATION – Quadivator B&S 18.5 PU Power Unit

Please fax this sheet to (204) 239-4271 or mail it to:

Quadivator Inc.
P.O. Box 1127
1000 – 6th Ave NE
Portage la Prairie
Manitoba, R1N 3C5
CANADA

Interframe Model #

Interframe Serial #

Power Unit Model #

Power Unit Serial #

Engine Model #

Engine Model Type

Purchased by (Name)

Address-

City

State/Prov./Mail Code

Dealer -

Date Purchased (D/M/Y)

Thank you!

