Subject: Engine Conversion Kit Installation Instruction

For Kit #922.48091 Clutch Installation

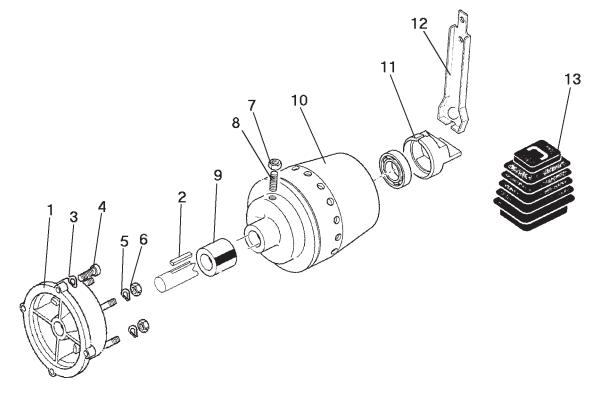
Note: All item numbers referenced in this instruction sheet are referencing the illustration on page 2 of this Bulletin.

- 1. Remove the spark plug lead from the spark plug on the engine.
- 2. Remove the throttle cable form the engine and tractor assembly.
- 3. Remove the engine stop cable from the engine and tractor assembly. This is the cable running from the red lever on the handles to the engine. Remove the cable anchor from the handlebar. This is the plastic piece that held the cable housing on the handlebar.
- 4. Remove the six (6) nuts and washers that is securing the engine to the transmission.
- 5. Slide the engine assembly away from the transmission.

Note: On electric start units: loosen the jam nut securing the battery bracket to the clutch cable adjustment bracket. Remove the battery box with the engine. When reassebling you will no longer use the BCS key switch and solenoid. The electric start components should be provided with the engine.

- 6. Install the new engine flange (item 1) onto the new engine using the four (4) 3/8 x 1" bolts and washers (item 3 & 4) supplied in the kit.
- 7. Slide the clutch spacer on the crankshaft (item 9)
- 8. Place the new key (item 2) onto the engine crankshaft.
- 9. Slide the clutch (item 10) onto the crankshaft until the clutch bottoms out on the crankshaft.
- 10. Tighten the set screw (item 8) in the clutch against the crankshaft.
- 11. Tighten the jam nut (item 7) against the clutch, this will secure the set screw.

- 12. Remove the original rubber boot and clutch lever on the transmission.
- 13. Position the new clutch lever in the transmission case.
- 12. Install the engine and clutch on the transmission case.
- 13. Form the cable clamp support, supplied in the kit, into a loop and place it onto the stud of the engine flange pointing at the 10:00 o'clock position as you are facing the engine recoil starter.
- 14. Install the engine on the transmission and six transmission studs. Do not push the engine all the way up against the transmission, leave approximately a 1/4" gap between the transmission and engine.
- 15. Line up the clutch lever (item 12) with the bearing holder on the clutch (item 11). The clutch lever should rest against the two arms coming from the bearing holder. See Illustration.
- 16. Push the engine all the way against the transmission and recheck the clutch lever placement. Secure the engine to the transmission with the six nuts and washers (item 5 & 6).
- 17. Install the new boot (item 13) onto the clutch lever and reinstall the clutch cable onto the clutch lever. Refer to the owners manual for the proper clutch cable adjustment.



- Install the spring holder and spring onto the red kill lever on the handlebars. The spring holder goes in the same location that the original cable end went on the red lever.
- 2. Install the switch holder and switch onto the handlebar. The switch holder goes through the same hole in the handlebar that the original cable anchor went through.
- 3. Install the new wiring harness onto the kill switch. Place the ground wire on the harness onto the stud of the switch holder. Install the new nut and washer onto the stud and tighten against the handlebar. The ground wire should be sandwiched between the handlebar and washer/nut.
- 4. Route the wireharness down the handlebar, handlebar column, transmission and cable clamp support (that you install with then engine). Plug the wireharness onto the kill terminal on the engine throttle system.

- Install the new throttle cable onto the throttle control on the handlebar. Route the cable down the handlebar, handlebar column, transmission and cable clamp support.
- Install the new cable adjuster supplied in the kit onto the cable housing clamp that
 comes on the engine. The cable adjuster will be threaded and allows you to adjust
 the throttle control once you have secured the cable to the engine. Route the throttle
 cable through the cable adjuster and through the cable holder on the engine's throttle
 system.
- 3. Make sure that you get idle and full throttle with the throttle control and engine. You can make any adjustments with the cable adjuster you just installed.

Engine Conversion Kit Instruction Sheet For Kit #922.99002

Clutch Installation

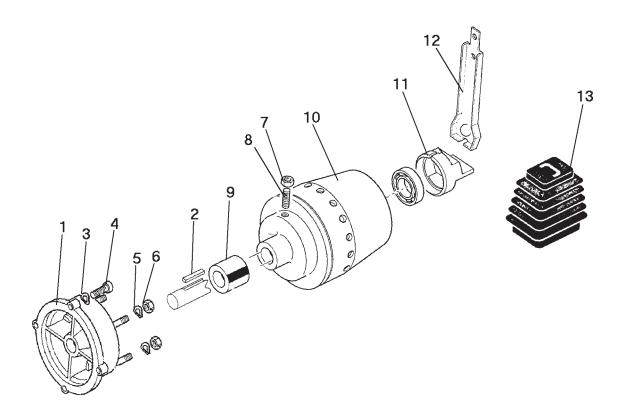
Note: All item numbers referenced in this instruction sheet are referencing the illustration on page 5 of this bulletin.

- 1. Remove the spark plug lead from the spark plug on the engine.
- 2. Remove the throttle cable form the engine and tractor assembly.
- 3. Remove the engine stop cable from the engine and tractor assembly. This is the cable running from the red lever on the handles to the engine. Remove the cable anchor from the handlebar. This is the plastic piece that held the cable housing on the handlebar.
- 4. Remove the six (6) nuts and washers that is securing the engine to the transmission.
- 5. Slide the engine assembly away from the transmission.

Note: On electric start units: loosen the jam nut securing the battery bracket to the clutch cable adjustment bracket. Remove the battery box with the engine. When reassebling you will no longer use the BCS key switch and solenoid. The electric start components should be provided with the engine.

- 6. Install the new engine flange (item 1) onto the new engine using the four (4) 3/8 x 1" bolts and washers (item 3 & 4) supplied in the kit.
- 7. Turn to page 11 of this document for Clutch installation instructions
- 8. Remove the original rubber boot and clutch lever on the transmission.
- 9. Position the new clutch lever in the transmission case.
- 10. Install the engine and clutch on the transmission case.
- 11. Form the cable clamp support, supplied in the kit, into a loop and place it onto the stud of the engine flange pointing at the 10:00 o'clock position as you are facing the engine recoil starter.

- 12. Install the engine on the transmission and six transmission studs. Do not push the engine all the way up against the transmission, leave approximately a 1/4" gap between the transmission and engine.
- 13. Line up the clutch lever (item 12) with the bearing holder on the clutch (item 11). The clutch lever should rest against the two arms coming from the bearing holder. See Illustration.
- 14. Push the engine all the way against the transmission and recheck the clutch lever placement. Secure the engine to the transmission with the six nuts and washers (item 5 & 6).
- 15. Install the new boot (item 13) onto the clutch lever and reinstall the clutch cable onto the clutch lever. Refer to the owners manual for the proper clutch cable adjustment.



- 1. Install the spring holder and spring onto the red kill lever on the handlebar. The spring holder goes in the same location that the original cable end went on the red lever.
- 2. Install the switch holder and switch onto the handlebar. The switch holder goes through the same hole in the handlebar that the original cable anchor went through.
- 3. Install the new wiring harness onto the kill switch. Place the ground wire on the harness onto the stud of the switch holder. Install the new nut and washer onto the stud and tighten against the handlebar. The ground wire should be sandwiched between the handlebar and washer/nut.
- 4. Route the wire harness down the handlebar, handlebar column, transmission and cable clamp support (that you install with then engine). Plug the wire harness onto the kill terminal on the engine throttle system.

- 1. Install the new throttle control onto the handlebar. Secure using the two bolts, washers and nuts. The throttle cable uses the bolt holes in the right handlebar just in front of the handlebar grip.
- 2. Route the throttle cable through the handlebar, handlebar column, transmission and through the cable holder on the engine's throttle system.
- 3. Make sure that you get idle and full throttle with the throttle control and engine. You can make any adjustments with the cable holder on the engine.

Engine Conversion Kit Instruction Sheet For Kit #922.99003 or Kit #922.99004

Clutch Installation for Briggs and Stratton

Note: All item numbers referenced in this instruction sheet are referencing the illustration on page 8 of this bulletin.

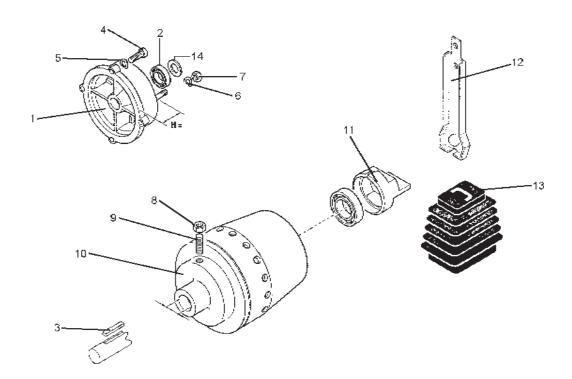
- 1. Remove the spark plug lead from the spark plug on the engine.
- 2. Remove the throttle cable form the engine and tractor assembly.
- 3. Remove the engine stop cable from the engine and tractor assembly. This is the cable running from the red lever on the handles to the engine. Remove the cable anchor from the handlebar. This is the plastic piece that held the cable housing on the handlebar.
- 4. Remove the six (6) nuts and washers that is securing the engine to the transmission.
- 5. Slide the engine assembly away from the transmission.

Note: On electric start units: loosen the jam nut securing the battery bracket to the clutch cable adjustment bracket. Remove the battery box with the engine. When reassebling you will no longer use the BCS key switch and solenoid. The electric start components should be provided with the engine.

- 6. Seat the bearing (item 2) supplied into the engine flange.
- 7. Turn to page 11 of this document for Clutch installation instructions
- 8. Remove the original rubber boot and clutch lever on the transmission.
- 9. Position the new clutch lever in the transmission case.
- 10. Install the engine and clutch on the transmission case.
- 10. Form the cable clamp support, supplied in the kit, into a loop and place it onto the stud of the engine flange pointing at the 10:00 o'clock position as you are facing the engine recoil starter.
- 11. Install the engine on the transmission and four transmission studs. Do not push the engine all the way up against the transmission, leave approximately a 1/4" gap between the transmission and engine.

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- 12. Line up the clutch lever (item 12) with the bearing holder on the clutch (item 11). The clutch lever should rest against the two arms coming from the bearing holder. See Illustration.
- 13. Push the engine all the way against the transmission and recheck the clutch lever placement. Secure the engine to the transmission with the nuts and washers (item 6 & 7).
- 14. Install the new boot (item 13) onto the clutch lever and reinstall the clutch cable onto the clutch lever. Refer to the owners manual for the proper clutch cable adjustment.



- Install the spring holder and spring onto the red kill lever on the handlebar. The spring holder goes in the same location that the original cable end went on the red lever.
- 2. Install the switch holder and switch onto the handlebar. The switch holder goes through the same hole in the handlebar that the original cable anchor went through.
- 3. Install the new wiring harness onto the kill switch. Place the ground wire on the harness onto the stud of the switch holder. Install the new nut and washer onto the stud and tighten against the handlebar. The ground wire should be sandwiched between the handlebar and washer/nut.
- 4. Route the wire harness down the handlebar, handlebar column, transmission and cable clamp support (that you install with then engine). Plug the wire harness onto the kill terminal on the engine throttle system.

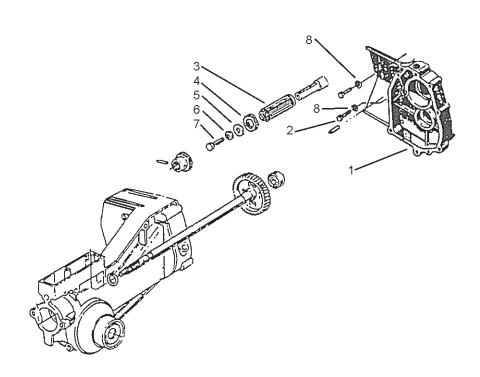
- 1. Install the new throttle control onto the handlebar. Secure using the two bolts, washers and nuts. The throttle cable uses the bolt holes in the right handlebar just in front of the handlebar grip.
- 2. Route the throttle cable through the handlebar, handlebar column, transmission and through the cable holder on the engine's throttle system.
- 3. Make sure that you get idle and full throttle with the throttle control and engine. You can make any adjustments with the cable holder on the engine.

Engine Conversion Kit Instruction Sheet For Kit #922.90704

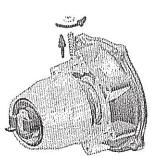
Conversion kit for 205 either for BCS 5HP or ACME 6hp into a Briggs and Stratton 5HP I/C

Kit Consists of:

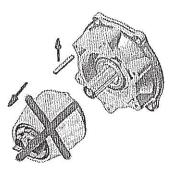
1 2 3	(1) (4) (1)	531.50175 311.04020 565.50290	FLANGE FOR B&S BOLT TCCE 5/16 X 3/4 ENGINE GEAR B&S
4A	(1)	524.50282	GEAR
4B	(1)	524.50281	GEAR (USED ONLY ON UNITS PRIOR TO SERIAL
			NUMBER 60,000. NEED TO ORDER SEPARATELY
			FROMKIT)
5	(1)	314.11092	FLAT WASHER
6	(1)	314.21083	SUPER WASHER M8
7	(1)	311.00016	BOLT TE 5/16 24UNF
8	(1)	580.51603	ACCELERATOR CABLE
	(1)	300.40005	OIL PLUG/BREATHER
	(1)	580.50251	GASKET, GEARBOX
	(1)	580.50115	GASKET, JOINT B&S
	(1)	314.22064	LOCK WASHER



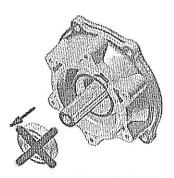
New Style Clutch Instructions



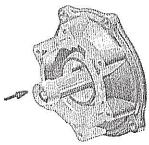
1. take out the screw



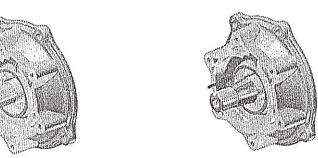
2. Take out the old clutch and the key



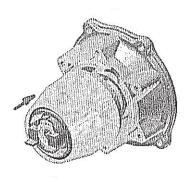
3. Remove thrust bearing from Engine adapter *



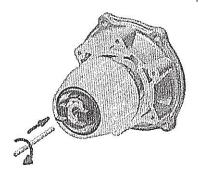
4. Slide the spacer (Honda only) on the crankshaft as far as it will go.



5. Fit the special cone bushing. Slide on Big end first, until it contacts the spacer.



6. Fit the new clutch



7. Tighten the screw with the Allen wrench

When using this style clutch with an engine adapter kit, the kit will contain an adapter plate and thrust bearing. If you are installing on a Honda engine, you will not be using the thrust bearing, if you are using a Briggs engine. Seat the thrust bearing in the adapter plate, slide the spacer washer on and proceed to **next step**

^{*} When using this clutch with a Briggs and Stratton engine, remove the key only! Re-use the thrust bearing in the adapter plate and the spacer washer between the clutch and the thrust bearing.

Engine Conversion Kit Instruction Sheet For Kit #922.99006

<u>Clutch Installation for Briggs and Stratton - 6.5 HP intek</u>

Note: All item numbers referenced in this instruction sheet are referencing the illustration on page 8 of this bulletin.

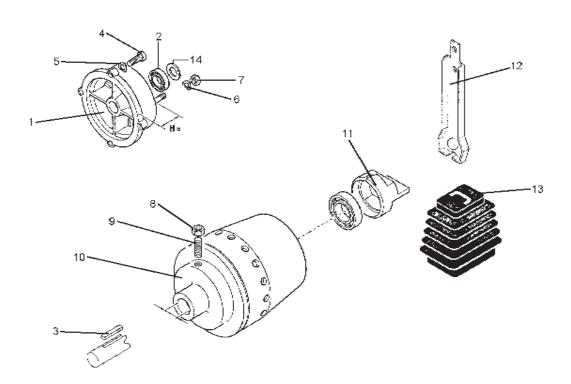
- 1. Remove the spark plug lead from the spark plug on the engine.
- 2. Remove the throttle cable form the engine and tractor assembly.
- 3. Remove the engine stop cable from the engine and tractor assembly. This is the cable running from the red lever on the handles to the engine. Remove the cable anchor from the handlebar. This is the plastic piece that held the cable housing on the handlebar.
- 4. Remove the six (6) nuts and washers that is securing the engine to the transmission.
- 5. Slide the engine assembly away from the transmission.

Note: On electric start units: loosen the jam nut securing the battery bracket to the clutch cable adjustment bracket. Remove the battery box with the engine. When reassebling you will no longer use the BCS key switch and solenoid. The electric start components should be provided with the engine.

- 6. Seat the bearing (item 2) supplied into the engine flange.
- 7. Install Clutch on Engine
 - a. Remove key from crankshaft, it will not be used.
 - b. Bolt adapter flange onto new engine, uding the 4 cap screws and washers supplied in kit (#4 and 5)
 - c. Slide thrustwasher (#14) onto crankshaft all the way up against the thrust bearing (#12)
 - d. Slide the compression coupler from the new clutch onto the crankshaft, large end
 - e. Slide the clutch over the end of the crankshaft and onto the compression coupler, tighten the clutch using the allen wrench supplied with the clutch kit. Tighten to 21 ft pounds
- 8. Remove the original rubber boot and clutch lever on the transmission.
- 9. Position the new clutch lever in the transmission case.

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- 10. Install the engine and clutch on the transmission case.
- 10. Form the cable clamp support, supplied in the kit, into a loop and place it onto the stud of the engine flange pointing at the 10:00 o'clock position as you are facing the engine recoil starter.
- 11. Install the engine on the transmission and four transmission studs. Do not push the engine all the way up against the transmission, leave approximately a 1/4" gap between the transmission and engine.
- 12. Line up the clutch lever (item 12) with the bearing holder on the clutch (item 11). The clutch lever should rest against the two arms coming from the bearing holder. See Illustration.
- 13. Push the engine all the way against the transmission and recheck the clutch lever placement. Secure the engine to the transmission with the nuts and washers (item 6 & 7).
- 14. Install the new boot (item 13) onto the clutch lever and reinstall the clutch cable onto the clutch lever. Refer to the owners manual for the proper clutch cable adjustment.



- 1. Install the spring holder and spring onto the red kill lever on the handlebar. The spring holder goes in the same location that the original cable end went on the red lever.
- 2. Install the switch holder and switch onto the handlebar. The switch holder goes through the same hole in the handlebar that the original cable anchor went through.
- 3. Install the new wiring harness onto the kill switch. Place the ground wire on the harness onto the stud of the switch holder. Install the new nut and washer onto the stud and tighten against the handlebar. The ground wire should be sandwiched between the handlebar and washer/nut.
- 4. Route the wire harness down the handlebar, handlebar column, transmission and cable clamp support (that you install with then engine). Plug the wire harness onto the kill terminal on the engine throttle system.

- 1. Install the new throttle control onto the handlebar. Secure using the two bolts, washers and nuts. The throttle cable uses the bolt holes in the right handlebar just in front of the handlebar grip.
- 2. Route the throttle cable through the handlebar, handlebar column, transmission and through the cable holder on the engine's throttle system.
- 3. Make sure that you get idle and full throttle with the throttle control and engine. You can make any adjustments with the cable holder on the engine.