



Customer Service Bulletin Commercial Business Group

Groundsmaster® 4000 Series

Date: May 5, 2003

<u>Model/Serial Range:</u>	<u>Model Numbers:</u>	<u>Serial Numbers:</u>
	30410	2100000101-230099999
	30411	2300000101-230099999
	30800	2200000101-230099999
	30800	2200000101-230099999

Subject: Difficult Engine Starting After Extended Periods of Non-Use.

The Kubota 2003T engine used in the Groundsmaster 4000 Series Tractors have been reported as difficult to start, exhibiting excessive crank time, or producing excessive white smoke. It also can run rough for the first few minutes of operation. The listed units may exhibit objectionable starting behavior after extended periods of non-use (overnight or after sitting idle all weekend). This may be caused by air leaking into the fuel supply circuit.

To correct this issue, slightly open the "Jet Start" air bleed valve located on the injection pump assembly. The valve should only be opened from the closed position 1/10th to 1/8th of turn maximum. This adjustment will allow any accumulated air in the system to be purged by the low-pressure fuel transfer pump during the initial glow cycle. The Jet Start Valve should be left in this position at all times during normal operation.

NOTE: This recommendation assumes that the glow plug and fuel delivery systems have been verified to operate correctly per Service Manual process.

Please contact your local Toro Commercial Products Distributor for further information.

