



Product Support Bulletin 340B

DATE: **May 15, 2004**

MACHINE: **Model C Spike Driving Machine**

SERIAL

NUMBER(S): **410001-410133 (12-volt), 410201-410304 (24-volt)**

SUBJECT: **Ductile Manifold Kits (Standard on machines s/n 410305 and higher)
Regeneration Conversions (Standard on machines s/n 410297 and higher)**

NOTE: THIS BULLETIN REPLACES BULLETIN NO. 340A

Kits to convert these machines from the original aluminum manifolds to ductile iron manifolds have been designed for field installation. Each kit will completely convert the manifold assembly shown in the charts on pages 2, 3 and 4 from aluminum to ductile manifolds and secondary modules.

These kits contain ductile manifolds, secondary valve modules if required, bolts, all required o-rings and identification plaques where required. All valves from the aluminum manifolds, both bolt on and cartridge (screw-in) types are to be reinstalled in the ductile manifolds by the customer. Early 12-volt machines use only one Pressure Reducing cartridge to control both the Tie Nipper up and down pressure. Later machines use separate pressure reducing valves for Tie Nipper up and down pressure. The **Nipper Manifold Kit, 98410095**, and **Nipper/Gager Manifold Kit, 98410097**, will include an extra **Pressure Reducing Cartridge, 1698960**. This will update the nippers to the latest design.

A **Spike Gun Regeneration** feature has been designed to minimize damage to the Spike Gun Tray Head if the spikes are not completely fed into the Spike Jaws when the spike gun is driven. Kits have been designed to add the Regeneration feature to the Driving Gun Assembly when converting to ductile manifolds. These kits will contain all the ductile modules in the Main Manifold Kits plus the required electrical items and valves to convert to driving gun regeneration. Use the list below to order the correct Main Manifold/Regeneration Kit.

Main Manifold/Regeneration Kits - 12-Volt Machines (s/n 410001 – 410133)

Hammer Equipped Machines ONLY – Kit 98410127: Includes ductile Main Manifold, p/n **50078855**; 4 combination pressure reducing, flow control, counterbalance, regeneration module blocks, p/n **50078895**, and all components required for Gun Regeneration.

NOTE: The Regeneration feature is NOT recommended for use with Push Only Machines (No Hammer)

Main Manifold/Regeneration Kits - 24-Volt Machines (s/n 410201 – 410304)

Note: Machines s/n 410297 – 410304 were built with the Regeneration feature and aluminum manifolds. Kit 98410125 will update these machines to ductile manifolds and 50078895 Regeneration Module Block.

Main Manifold with Gager – Kit 98410125: Includes 2 ductile Main Manifolds, p/n **50078856**; 4 combination pressure reducing, flow control, counterbalance, regeneration module blocks, p/n **50078895**, and all components required to add Gun Down Regeneration to machines not originally equipped with this feature.

NORDCO Product Support Bulletin 340B

Manifold Replacement Kits for Model C Spiking Machines – 12-Volt Machines					
		Manifolds & Modules Included with Replacement Kits			
Original Aluminum Assembly Shown in Parts Manual	Kit Required for Complete Manifold Replacement ¹	Description	Part Number	Replaces Aluminum Block	Qty per Kit
50078454	98410090 ²	Main Manifold (Push/Hammer Machines)	50078855	50078836	1
		Flow Control/Counterbalance Module	5007 8904	50078840	4
		Pressure Reducing Valve Module	50078905	50078841	4
50078450	98410091 ²	Main Manifold (Push Only Machines)	50078855	50078836	1
		Flow Control/Counterbalance Module	50078904	50078840	4
50078821	98410092 ³	Propel/Pressure Filter Manifold (Dual Axle Drive)	50078857	50078832	1
		Cross Over Relief Module	50078896	50078843	1
50078845	98410093 ³	Propel/Pressure Filter (Single Axle Drive)	50078857	50078832	1
		Cross Over Relief Valve Module	50078896	50078843	1
		Traction Control Module	50080001	50078853	1
50078455	98410095	Nipper Only Manifold (early version with 1 Pressure Reducing Valve)	50078897	50078833	1
		Nipper Pressure Reducing Valve Module	50078907	50078839	1
		Pressure Reducing Cartridge Valve	1698960	N/A	1
50078480	98410095	Nipper Only Manifold (later version with 2 Pressure Reducing Valves)	50078897	50078833	1
		Nipper Pressure Reducing Valve Module	50078898	50078851	1
50078368	98410096	Load/Guide Roller Manifold	50078899	50078844	1
50078460	98410097	Nipper/Gager Manifold (for early machines with 1 Pressure Reducing Valve)	50078900	50078834	1
		Nipper Pressure Reducing Module	50078898	50078839	1
		Pressure Reducing Cartridge Valve	1698960	N/A	1
50078482	98410097	Nipper/Gager Manifold (for later machines with 2 Pressure Reducing Valves)	50078900	50078834	1
		Nipper Pressure Reducing Valve Module	50078898	50078851	1
50078458	98410098 (Allied Hammer)	Hammer Manifold	50078903	50078837	1
		Flow control/ Pressure Reducing Valve Module (Allied or Kent Hammer)	50078902	50078842	4
50078462	98410115 (Kent Hammer)	Hammer Manifold	50078903	50078837	1
		Flow Control Module (Note: Pressure Reducing Valves are not required for machines equipped with Kent Hammers.)	50078903	N/A	4

¹ Kits will include Bolts, Plugs (where needed), 90 durometer o-rings, & labels, for ease of replacement. **Kits contain bare manifold and module blocks and do not contain any valves.**

² Use Regeneration Upgrade kit P/N 98410086 for 12 Volt Machines with aluminum Main Manifold **ONLY** if not converting the Main Manifold to ductile at the same time. This kit contains the 50078904 Flow control/Ctr. Balance module block, 50078905 Press. Reducing. Module block and 1606526 Regeneration valve/module required for machines with aluminum manifolds. **Use Kit 98410127 to convert the Main Manifold to Ductile and add the Regeneration feature at the same time.**

³ Because of the heavy duty mounts used with the Ductile Manifolds, It may be necessary to enlarge the Pressure Filter opening in the Manifold Guard when replacing the Propulsion Manifold if equipped. Contact the NORDCO Service Department if you have any questions.

NORDCO Product Support Bulletin 340B

Manifold Replacement Kits for Model 99C Spiking Machines – 24-Volt Machines Push/Hammer Machine with Nippers					
		Manifolds & Modules in Included with Replacement Kits²			
Original Aluminum Assembly Shown in Parts Manual	Kit Required for Manifold Replacement¹	Description	Part Number	Replaces Aluminum Block	Qty per Kit
50078510 (with Gager)	98410100	RH Main Manifold	50078856	50078870	1
		Gager Manifold	50078626 ⁵	55490025	1
		Flow Control, Counterbalance, Pressure Reducing & Regeneration ²	50078895 ⁴ (will only fit 50078856 ductile manifold)	50078840 & 50078841	4
50078510 (without Gager)	98410101	RH Main Manifold	50078856 ⁵	50078870	1
		Flow Control, Counterbalance, Pressure Reducing, Regeneration Module ²	50078895 ⁴ (will only fit 50078856 ductile manifold)	50078840 & 50078841	4
50078520	98410102	LH Main Manifold Assembly	50078856	50078870	1
		Flow Control, Counterbalance, Pressure Reducing, Regeneration Module ²	50078895 ⁴ (will only fit 50078856 manifold)	50078840 & 50078841	4
50078540	98410105	Propulsion Manifold (for machines prior to S/N410305 not equipped with pressure filter)	50078622 ³	50078640	1
		Nipper Pressure Reducing Valve Module (for 2 Pressure Reducing Valves)	50085012	50078623	1
		Cross Over Relief Valve Module	50078896	50078843	1
		Pressure Filter	3880266	N/A	1
50078540	98410104	Propulsion Manifold (for machines prior to S/N410305 equipped with pressure filter)	50078622 ³	50078640	1
		Nipper Pressure Reducing Valve Module (for 2 Pressure Reducing Valves)	50085012	50078623	1
		Cross Over Relief Valve Module	50078896	50078843	1
50078487	98410106	Spike Feed, Guide Roller, Pattern Adjust Manifold	50078630	50078871	1

¹ Kits will include bolts, plugs (when needed), 90 durometer o-rings & labels. Kit 98410105 will also include a Pressure Filter Assembly, p/n 3880266, Filter indicator Cable, p/n 22311092, and filter mounting hardware.

² Use Regeneration Upgrade kit P/N 98410076 for 24 Volt Machines with aluminum Main Manifold **ONLY** if not converting the Main Manifold to ductile at the same time. This kit contains the 50078904 Flow control/Ctr. Balance module block, 50078905 Press. Red. Module block and 1606526 Regeneration valve/module required for machines with aluminum manifolds. **Use Kit 98410125 to Upgrade Main Manifold to Ductile and add the Regeneration feature at the same time.**

³ When replacing the Propulsion Manifold, because of the heavy-duty mounts used with the ductile manifolds, it may be necessary to enlarge the pressure filter opening in the manifold guards if so equipped.

⁴ Use 50078904 ductile Flow Control & Counter-balance Module when replacing only the 50078840 aluminum Flow Control & Counter-balance Module. Use 50078905 ductile Pressure Reducing Module Block when replacing only the 50078841 aluminum Pressure Reducing Module. **The 50078895 Counter-balance/Pressure Reducing/Regeneration Module WILL NOT FIT on aluminum manifold 50078870.** The 50078840 and 50078841 aluminum modules **WILL FIT** ductile manifold block 50078856.

⁵ Use 50070020 ductile Gager Module Block when only replacing 55490025 aluminum Gager Module Block. **The 50078626 Gager Module Block WILL NOT FIT on aluminum manifolds.**

NORDCO Product Support Bulletin 340B

Manifold Replacement Kits for Model 99C Spiking Machines – 24-Volt Machines Push/Hammer Machine without Nippers					
		Manifolds & Modules in Included with Replacement Kits²			
Original Aluminum Assembly Shown in Parts Manual	Kit Required for Manifold Replacement¹	Description	Part Number	Replaces Aluminum Block	Qty per Kit
50078510 (with Gager)	98410100	RH Main Manifold	50078856	50078870	1
		Gager Manifold	50078626 ⁵	55490025	1
		Flow Control, Counterbalance, Pressure Reducing & Regeneration ²	50078895 ⁴ (will only fit 50078856 ductile manifold)	50078840 & 50078841	4
50078510 (without Gager)	98410101	RH Main Manifold	50078856 ⁵	50078870	1
		Flow Control, Counterbalance, Pressure Reducing, Regeneration Module ²	50078895 ⁴ (will only fit 50078856 ductile manifold)	50078840 & 50078841	4
50078520	98410102	LH Main Manifold Assembly	50078856	50078870	1
		Flow Control, Counterbalance, Pressure Reducing, Regeneration Module ²	50078895 ⁴ (will only fit 50078856 manifold)	50078840 & 50078841	4
50078540	98410105	Propulsion Manifold (for machines prior to S/N410305 not equipped with pressure filter)	50078622 ³	50078640	1
		Nipper Pressure Reducing Valve Module (for 2 Pressure Reducing Valves)	50085012	50078623	1
		Cross Over Relief Valve Module	50078896	50078843	1
		Pressure Filter	3880266	N/A	1
50078540	98410104	Propulsion Manifold (for machines prior to S/N410305 equipped with pressure filter)	50078622 ³	50078640	1
		Nipper Pressure Reducing Valve Module (for 2 Pressure Reducing Valves)	50085012	50078623	1
		Cross Over Relief Valve Module	50078896	50078843	1
50078487	98410106	Spike Feed, Guide Roller, Pattern Adjust Manifold	50078630	50078871	1

¹ Kits will include bolts, plugs (when needed), 90 durometer o-rings & labels. Kit 98410105 will also include a Pressure Filter Assembly, p/n 3880266, Filter indicator Cable, p/n 22311092, and filter mounting hardware.

² Use Regeneration Upgrade kit P/N 98410076 for 24 Volt Machines with aluminum Main Manifold **ONLY** if not converting the Main Manifold to ductile at the same time. This kit contains the 50078904 Flow control/Ctr. Balance module block, 50078905 Press. Red. Module block and 1606526 Regeneration valve/module required for machines with aluminum manifolds. **Use Kit 98410125 to Upgrade Main Manifold to Ductile and add the Regeneration feature at the same time.**

³ When replacing the Propulsion Manifold, because of the heavy-duty mounts used with the ductile manifolds, it may be necessary to enlarge the pressure filter opening in the manifold guards if so equipped.

⁴ Use 50078904 ductile Flow Control & Counter-balance Module when replacing only the 50078840 aluminum Flow Control & Counter-balance Module. Use 50078905 ductile Pressure Reducing Module Block when replacing only the 50078841 aluminum Pressure Reducing Module. **The 50078895 Counter-balance/Pressure Reducing/Regeneration Module WILL NOT FIT on aluminum manifold 50078870.** The 50078840 and 50078841 aluminum modules **WILL FIT** ductile manifold block 50078856.

⁵ Use 50070020 ductile Gager Module Block when only replacing 55490025 aluminum Gager Module Block. **The 50078626 Gager Module Block WILL NOT FIT on aluminum manifolds.**