

Kinetix[®] Puller Link Upgrade Kit



WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

Introduction

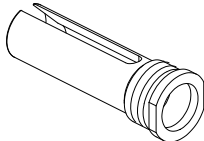
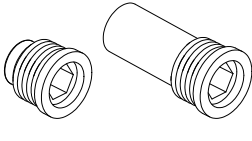
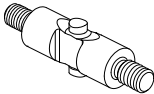
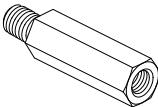
Two kits are available to upgrade Kinetix automatic spray guns manufactured before January 2004. The upgrade kits allow for simplified maintenance and repair of a Kinetix automatic spray gun.

The **Puller Link Kit** includes a bushing retainer and puller link adapter.

The **Upgrade Kit** includes a spacer block, bushing retainer, and puller link adapter.

The three new parts can be ordered separately but you cannot use one part without the other two. Refer to Table 1 for an illustration of the new parts.

Table 1 Upgrade Kit Information

New Part	Replaces Part (Now obsolete)	Included in Puller Link Kit, part 1045981	Included in Upgrade Kit, part 1045984
Bushing Retainer 1045778 	Bushing Retainer 336695  Short Long	✓	✓
Adapter Link 1045777 	Puller Link 336624 	✓	✓
Spacer Block 336621			✓

NOTE: The spacer block part number, 336621, has been reconfigured to allow for the new longer slotted bushing retainer. To use the new bushing retainer and adapter link you must order the new spacer block.

NOTE: The newly designed spacer block, part 336621, can also be used with the obsolete longer bushing retainer, part 336695, and obsolete puller link, part 336624, if necessary.

Installation



WARNING: Shut off the power supply. Ground the spray gun's electrode to remove any residual charge. Failure to observe this warning could result in personal injury.



WARNING: Shut off the fluid-delivery system. Relieve the fluid pressure in the system. Failure to observe this warning could result in an injection injury.



WARNING: Use only Nordson replacement parts to repair the spray gun. Deviating from the repair instructions, using unauthorized parts, or making unauthorized modifications can result in personal injury or death and/or the loss of approvals by agencies such as Factory Mutual Research Corporation (FM) or the Canadian Standards Association (CSA).



CAUTION: Do not overtighten threaded parts. Failure to observe this caution will result in equipment damage.

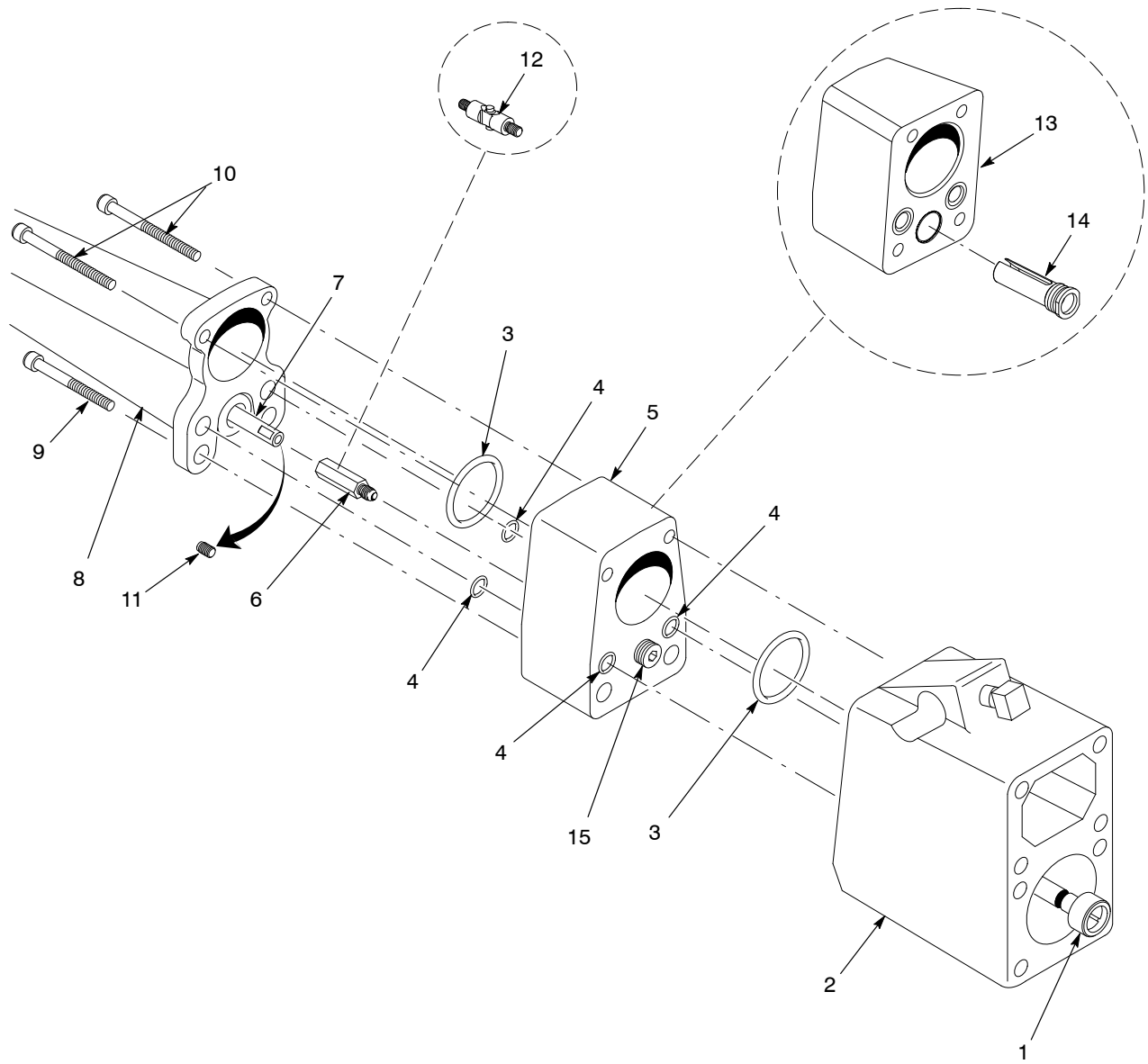
Prepare the Spray Gun

1. Turn off the power supply. Refer to the *Kinetix Automatic Gun Power Supply* manual. Ground the spray gun's electrode to remove any residual charge.
2. Flush the fluid-delivery system, hoses, and spray gun.
3. Turn off the fluid-delivery system. Relieve system fluid pressures. Point the spray gun into the booth or grounded container and activate it to relieve any residual pressure.
4. Disconnect the fluid hose from the spray gun and move the spray gun to a clean, dry, flat surface.
5. Refer to your spray gun manual disassembly information and remove the following:
 - Retaining ring and air cap assembly
 - Ball tip or needle
 - Fluid adjuster housing and fluid and piston return springs
 - Extension

Install the New Kit Parts

1. See Figure 1. Remove all the O-rings from the old spacer block (5) and inspect them for damage. Replace them if necessary. Discard the old spacer block.

NOTE: If you currently have the longer version of bushing retainer, part 336695, you may reuse your existing spacer block.
2. Install the four face-seal O-rings (4) and the two large face-seal O-rings (3) on the new spacer block (13) from the upgrade kit. Lubricate the O-rings with O-ring grease.
3. Apply a removeable threadlocking adhesive to the threads of the new bushing retainer (14) and install it into the new spacer block.
4. Hold the flats on the pull shaft (7) with a small $\frac{5}{32}$ wrench and unscrew the old puller link (6). Discard the puller link.



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Figure 1 Install the New Kit Parts

- | | | |
|----------------------------|------------------------|-----------------------------|
| 1. Connecting rod | 6. Puller link | 11. Threaded stud |
| 2. Piston block body | 7. Pull shaft | 12. New puller link adapter |
| 3. Large face-seal O-rings | 8. Extension | 13. New spacer block |
| 4. Face-seal O-rings | 9. Socket-head screws | 14. New bushing retainer |
| 5. Old spacer block | 10. Socket-head screws | 15. Old bushing retainer |

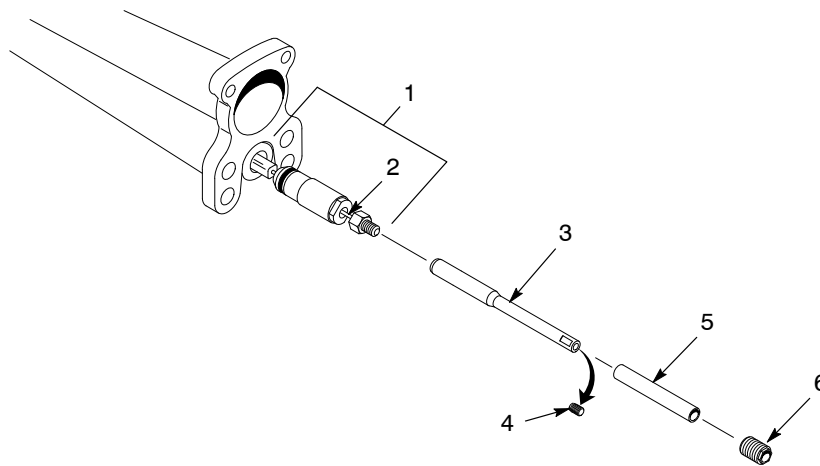
Install the New Kit Parts *(contd)*

5. Carefully remove the threaded stud (11) from the end of the pull shaft.

NOTE: It may be necessary to remove the pull shaft from the extension to remove the threaded stud. If so, follow this procedure.

See Figure 2.

- a. Push the pull shaft forward into the extension and unscrew the packing cartridge retainer (6) with the combination tool or deep well socket.
 - b. Pull the pull shaft out of the back of the extension to remove the pull shaft (3), packing cartridge (1), and sleeve retainer (5). Do not bend the connecting wire (2).
 - c. Remove the sleeve retainer from the pull shaft and unscrew the pull shaft from the packing cartridge assembly.
 - d. Carefully remove the threaded stud (4) from the end of the pull shaft.
 - e. Apply a small drop of threadlocking adhesive to the threads of the packing cartridge assembly and screw on the revised pull shaft.
 - f. Apply dielectric grease to the packing cartridge and pull shaft.
 - g. Insert the packing cartridge and pull shaft into the extension from the back.
 - h. Apply thin coating of dielectric grease to the outside of the sleeve retainer then slide the sleeve retainer over the pull shaft and push down over the fluid bores.
 - i. Apply a thin coating of dielectric grease to the threads of the packing cartridge retainer. Screw the packing cartridge retainer into the extension. Wipe off excess dielectric grease.
6. See Figure 1. Apply a small drop of threadlocking adhesive to the threads of one end of the new puller link adapter (12) and install it in the end of the pull shaft.

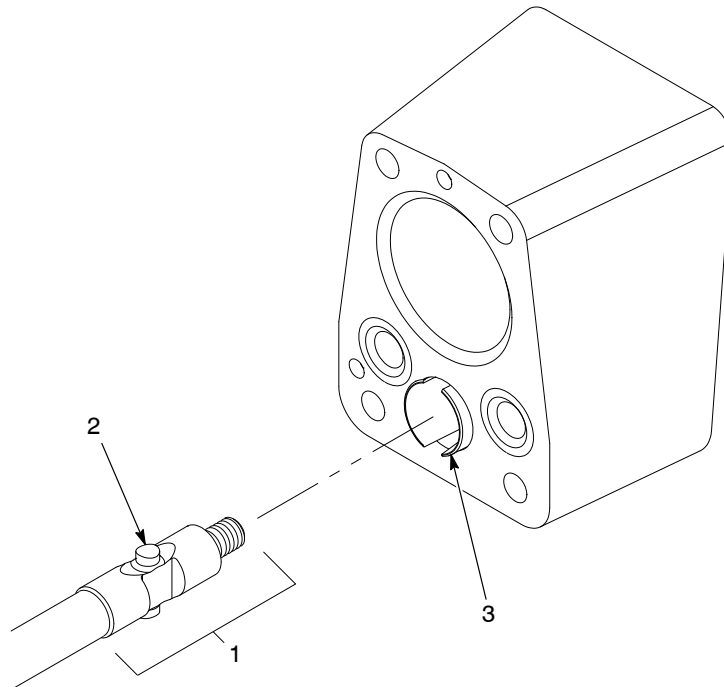


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Figure 2 Remove the Threaded Stud

- | | | |
|----------------------|------------------|-------------------------------|
| 1. Packing cartridge | 3. Pull shaft | 5. Sleeve retainer |
| 2. Connecting wire | 4. Threaded stud | 6. Packing cartridge retainer |

Assemble the Spray Gun



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Figure 3 Align the Puller Link Adapter and Bushing Retainer

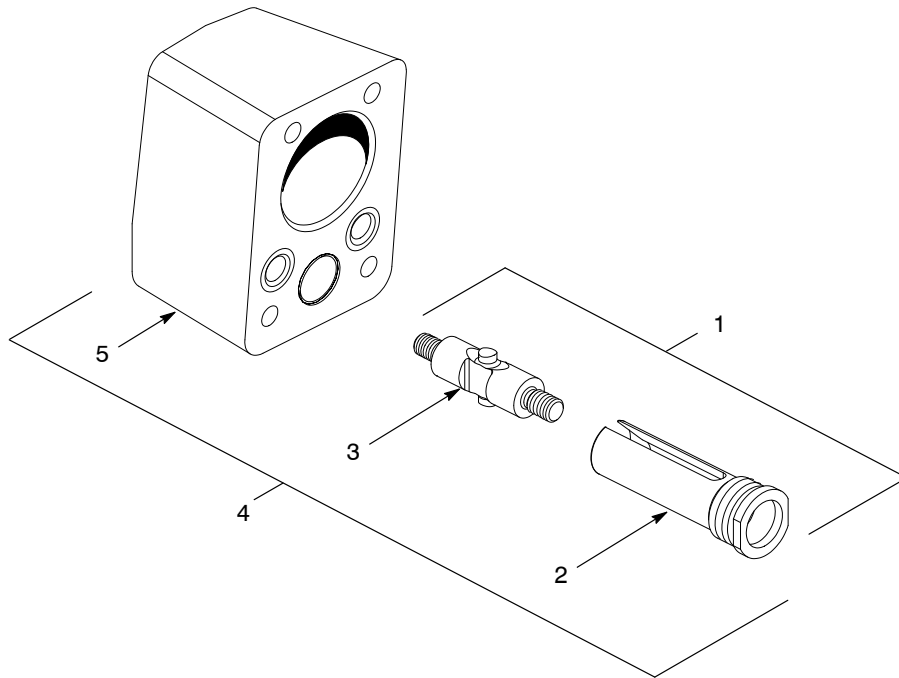
- | | |
|------------------------|---------------------|
| 1. Puller link adapter | 3. Bushing retainer |
| 2. Pins | |

1. See Figure 3. Align the pins (2) on the new puller link adapter (1) with the slots in the new bushing retainer (3) and place the spacer against the extension.
2. See Figure 1. Grasp the entire spray gun, making sure to hold onto the piston block body (2), extension (8), and the new spacer block (13). Turn the spray gun so it is on its side. Attach the connecting rod (1) by tightening it with the flat-blade screwdriver on the combination tool.
3. Secure the extension to the body with the four socket-head screws (9 and 10). Tighten the screws to 2.27–2.83 N•m (20–25 in.-lb).
4. Assemble the remaining spray gun components by referring to your spray gun manual.

Parts

Puller Link Kit

Item	Part	Description	Quantity	Note
1	1045981	KIT, puller link, Kinetix	1	
2	1045778	<ul style="list-style-type: none"> RETAINER, bushing, Kinetix 	1	
3	1045777	<ul style="list-style-type: none"> ADAPTER, link-pin 8-32 UNC-2A Kinetix 	1	



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Figure 4 Puller Link and Upgrade Kits

Upgrade Kit

Item	Part	Description	Quantity	Note
4	1045984	KIT, puller link upgrade, Kinetix	1	
2	1045778	<ul style="list-style-type: none"> RETAINER, bushing, Kinetix 	1	
3	1045777	<ul style="list-style-type: none"> ADAPTER, link-pin 8-32 UNC-2A Kinetix 	1	
5	336621	<ul style="list-style-type: none"> SPACER, electrostatic , automatic 	1	A
NS	336499	<ul style="list-style-type: none"> O-RING, PTFE, 1.051 x 0.070 in. wide 	2	
NS	940110	<ul style="list-style-type: none"> O-RING, hotpaint, 0.313 x 0.438 x 0.063 in. 	4	

NOTE A: The newly designed spacer block, part 336621, can also be used with the obsolete bushing retainer, part 336695, and obsolete puller link, part 336624, if necessary.

NS: Not Shown

Issued 2/04

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