Dixon MannTek Dry Disconnect & Dry Gas Fittings

Rebuild Guidance for Dual Fuel Systems

Purpose:

This document offers guidance on the necessary parts and components for rebuilding MannTek Dry Disconnect Fittings and MannTek Dry Gas Fittings, versions 1.0 and 2.0, with a focus on sizes and styles commonly found in dual fuel systems within the hydraulic fracking industry.

For routine or preventative maintenance, and repairs due to damage, the table on the back of this document details the parts, quantities, and tools needed or recommended for servicing couplers and adapters. Preventative maintenance typically involves replacing 0-rings and bushings, while damage repairs often require replacing handles, protective rings (bumpers), and sometimes inner packs.

Applicability:

- 2" and 3" dry disconnect couplers and adapters (stainless steel, versions 1.0 & 2.0)
- 2" and 3" dry gas couplers and adapters (stainless steel, versions 1.0 & 2.0)

Differentiating Between Version 1.0 & 2.0:

- Part number identification: Version 2.0 part numbers begin with "2" (e.g., 2DGC200SS vs. DGC200SS)
- Protective ring (bumper):
 - Version 2.0: Larger (deeper) bumper extending further back on the coupler head, with alignment arrows Version 1.0: Short, round bumper without alignment arrows
- Handle design: Version 2.0 handles have a flat diamond-shaped top
 Version 1.0 handles have a rounded top

Notes (General and specific to table on back):

- O-rings will need to be replaced annually or more frequently for harsher environments. Given the harsh environment of hydraulic fracturing, it is recommended that the components included in a repair kit also be replaced. This will require one O-ring kit and one repair kit for each coupler and adapter serviced.
- 2. Both handles and their hardware should be replaced during the repair process. Protective rings many also need replacing.
- 3. The components of inner pack kits typically only need to be replaced if they are worn or damaged from misuse. When replacing inner packs, O-ring kits are needed for DDCs but not DGCs. Additionally, since the coupler is disassembled during the inner pack replacement, it is recommended that a repair kit also be used to replace those components.
 - DGC Inner Pack kits come with O-rings pre-installed; additionally these kits come with two additional O-rings which allow for all O-rings to be replaced on a coupler during maintenance
 - DDC Inner Pack kits do not come with 0-rings pre-installed; an 0-Ring Kit is needed. DDCs are used in a greater variety of applications which dictate different 0-ring material requirements
- 4. The 0-ring kits listed in this literature are made of FKM (denoted by the 'VI' in the part number).
- 5. Handle kits, which include all the necessary components for a complete handle replacement on a coupler, are available for certain sizes and versions.
- 6. Individual handle components are available. Quantities, listed in the table, reflect the number of components needed for a complete handle change out on a coupler.
- 7. Tools are used to remove the inner pack in the couplers and the piston/poppet in the adapter.
- 8. Wrenches are tailored to fit the flats of the 2" and 3" coupler sleeves and are used for both installation on a hose and coupler disassembly.
- 9. Contact Dixon if other O-ring materials or repair components are needed.

References:

Dual Fuel: https://dixonvalve.com/sites/default/files/documents/Dual-Fuel-Brochure-2023-FINAL.pdf
Dixon MannTek DDC and DGC Couplings – 2.0 Design: https://dixonvalve.com/sites/default/files/documents/New-Manntek-DDC-DGC_1.pdf

Dry Disconnects and Breakaways: https://dixonvalve.com/sites/default/files/documents/Dry-Disconnect-2024.pdf MannTek Coupling and Adapter Service Instructions, various

Dixon® MannTek

Servicing Components and Tools



T00L410-3	T00L421-1	7609-09	S-IP4M-24-71 7609-09	-	7617-4 (4)	7633-1B/0 (2)	119DGCHK2.0	119DGCRKSS2.0 119DGCHK2.0 7633-1B/O (2) 7617-4 (4)	119DGCORKVI	2DGC300SS
T00L410-3	T00L421-1	1058-02	S-IPM4-24-71	ı	1141-4 (4)	1991-1B/0 (2) 1141-4 (4)	119DGCHK	119DGCRKSS	119DGCORKVI	DGC300SS
ı	T00L020	I	ı	I	ı	1	ı	119DGARKSS	119DGAORKVI	DGA300SS
T00L265-3	T00L221LPG-4	7607-09	S-IP2M-2471	1	7616-4 (4)	7622-1B/0 (2) 7616-4 (4)	71DGCHK2.0	71DGCRKSS2.0	71DGCORKVI2.0	2DGC200SS
T00L265-3	T00L221LPG-4	1018-02	S-IPM2-24-71	1247-4 (2)	3256-4 (2) 1247-4 (2)	3191-1B/0 (2)	71DGCHK	71DGCRKSS	71DGCORKVI	DGC200SS
I	T00L020	1	I	ı	l	I	I	71DGARKSS	71DGAORKVI	DGA200SS
T00L410-3	T00L421-1	7609-09	S-IP4S-44	I	7617-4 (4)	7632-1B/B (2)	119DDCHK2.0	119CRKSS2.0	119CORKVI	2DDC300SS
T00L410-3	T00L421-1	1058-02	S-IP4-44	I	1141-4 (4)	1189-1B (2)	119DDCHK	119CRKSS	119CORKVI	DDC300SS
I	T00L020	1	I	ı	l	I	I	119ARKSS	119AORKVI	DDA300SS
T00L265-3	T00L221-1	7607-09	S-IP2S-44	I	7616-4 (4)	7622-1B/B (2) 7616-4 (4)	70DDCHK2.0	70CRKSS2.0	70CORKVI	2DDC200SS
T00L265-3	T00L221-1	1018-02	S-IP2-44	1101-4 (3)	1099-4 (3) 1101-4 (3)	H-S2-44-01 (1)	70DDCHK	70CRKSS	70CORKVI	DDC200SS
I	T00L020	l	I	I	I	1	I	70ARKSS	70AORKVI	DDA200SS
Wrench	Inner Pack Removal Tool or Adapter Removal Tool	Protective Ring (Bumper)	Inner Pack Kit	Nuts or Lock Washers (qty. req.)	Screws or Bolts (qty. req.)	Handle Replacement Components Handles Screws or Lock (qty. req.) (qty. req.) (qty. req.)	Handle Kit	Repair Kit	0-Ring Kit	Part # *

^{*} Parts listed are for female NPT connections. Parts with flange connections (denoted by "FL" at end of part number, e.g. DGC200SSFL) use the same repair parts and tools as those with female NPT connections.

Dixon

1 Dixon Sq., Chestertown, MD 21620 ph: 877.963.4966 • fx: 800.283.4966 dixonvalve.com