# Meggitt Fuelling Products Avery-Hardoll Whittaker Controls

## 1.5 inch self-sealing industrial couplings

with cam operated hose units CMY6153 series and tank units CCMY6150, CCMY6151 series

## Maintenance manual with spare parts list

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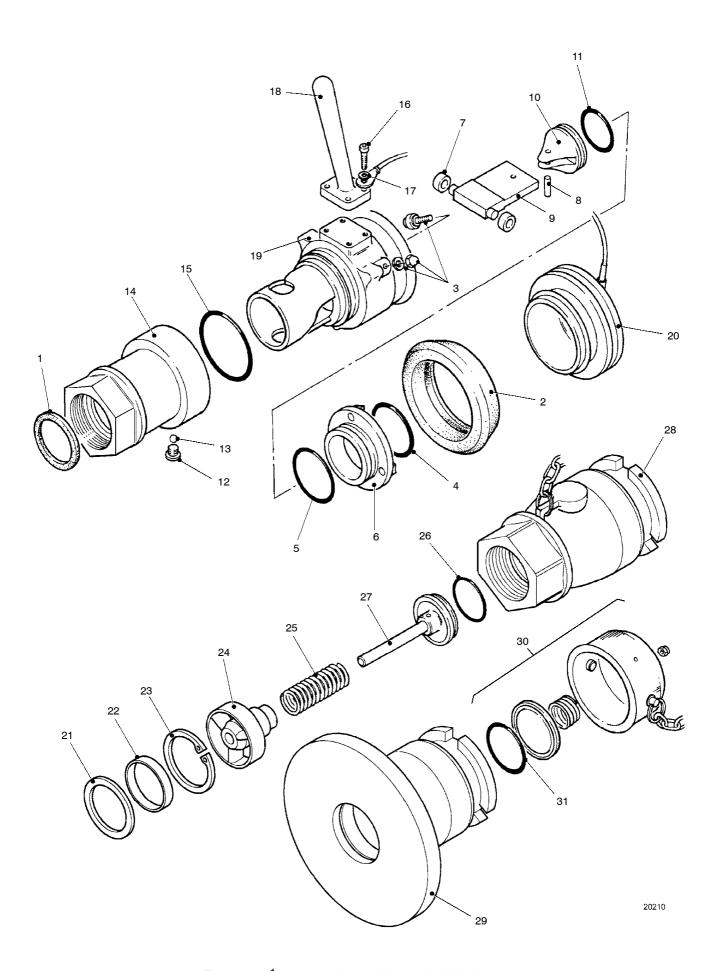


Figure 1  $\,$  1  $^{1}/_{2}$  in. couplings with standard blanking caps

#### Spare parts identification and ordering

- The letters in the 'Use on' column in the following spares list are the part number suffix letters of the coupling to which the part should be fitted. Always quote the coupling part number in full, as well as the item part number when ordering spares.

<u>Item</u>	Part Number	Description	Use on	Qty
-	_	Hose unit		Ref
1*	CCRZ269-1	. Seal, connector 1 <sup>1</sup> / <sub>2</sub> in Viton (Fluorocarbon)	V	1
	CCRZ269	. Seal, connector $1^{1/2}$ in Nitrile	N	1
2*	CCRZ116	. Ring, buffer		1
3	CCMS6188	. Bayonet roller assy		3
4*	Z032E223139A	. Seal, O-ring - Viton (Fluorocarbon)	V	1
	Z022E223139A	. Seal, O-ring - Nitrile	N	1
5*	Z032E224139A	. Seal, O-ring - Viton (Fluorocarbon)	V	1
	Z022E224139A	. Seal, O-ring - Nitrile	Ň	1
6	NOT SPARED	. Spanner ring assy		Ref
7	CCCZ6191	. Roller, cam		2
8	ZT4011M0516A	. Tension Pin		1
9	NOT SPARED	. Rod, connecting		Ref
10	NOT SPARED	. Valve		Ref
11 *	Z032E218139A	. Seal, O-ring - Viton (Fluorocarbon)	V	1
•••	Z022E218139A	. Seal, O-ring - Nitrile	Ň	1
12	CCSZ8194	. Plug		1
13	ZACZ0068-4	. Ball, $\frac{7}{32}$ in. dia		35
14	NOT SPARED	. Connector, hose - $1^{1}/_{2}$ in.		Ref
15*	Z032E227139A	. Seal, O-ring - Viton (Fluorocarbon)	V	1
10	Z022E227139A	. Seal, O-ring - Nitrile	Ň	i
16	ZS4025M04012A	. Screw	H	4
17	ZW4007M04A	. Washer, spring	 H	4
18	CCSZ8184	. Handle	 H	1
19	NOT SPARED	. Cam		Ref
20	CCMY324-1	Hose unit dust cap		1
20	OOW 1324-1	Hose unit dust cap		
-	-	Tank unit		Ref
21*	CCRZ269-1	. Seal - Viton (Fluorocarbon) (BSP unit only)	V	1
	CCRZ269	. Seal - Nitrile (BSP unit only)	N	1
22	CCCZ6176	. Spacer (BSP unit only)		1
23	ZASZ0058-39	. Circlip		1
24	CCPZ6173	. Valve guide		1
25	CCSZ223	. Spring		1
26*	Z032E227139A	. Seal, O-ring - Viton <b>(Fluorocarbon)</b>	V	1
	Z022E227139A	. Seal, O-ring - Nitrile	N	1
27	NOT SPARED	. Valve assy		Ref
28	NOT SPARED	. Body, screwed (CCMY6151 series)		Ref
29	NOT SPARED	. Body, flanged (CCMY6150 series)		Ref
30	CCMY4VN	Tank unit blanking cap (with chain) - Viton	V	1
	CCMY4SP1	Tank unit blanking cap (with cable) - Nitrile	Ň	1
31*	ZARZ0041-37	. Seal, O-ring - Viton (Fluorocarbon)	V	1
	ZARZ0041-2	. Seal, O-ring - Nitrile	Ň	1
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<sup>\* =</sup> Suggested spare part Ref = Reference only

+ = Item not illustrated

- The 11/2 inch couplings are supplied in a choice of seal materials and with optional selectivity to suit a particular application or customer requirement. The coupling build standard is indicated by the part number suffix letters:

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1st suffix; N or V = seal material
2nd suffix; H = handle (optional)
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2nd or 3rd suffix; ST, SU, SV, SW, SX, SY or SZ = selectivity (optional)

#### Data:

- Working pressure (max)	
- Coupling pressure (max, no-flow conditions)	4 bar (60 psi)
- Static test pressure	18 bar (265 psi)

#### Operating temperature range:

Fluorocarbon (Viton) seals (Part No. suffix V) ......-20 to +120 deg C (-4 to +248 deg F) Nitrile (Part No. suffix N) .....-30 to +120 deg C (-22 to +248 deg F)

WARNING: DO NOT HANDLE O-RING SEALS IF THEIR MATERIAL APPEARS CHARRED, GUMMY OR STICKY. USE TWEEZERS AND WEAR NEOPRENE OR PVC GLOVES. DO NOT TOUCH ADJACENT PARTS WITH UNPROTECTED HANDS. NEUTRALIZE ADJACENT PARTS WITH A SOLUTION OF CALCIUM HYDROXIDE. IF THE DEGRADED MATERIAL OR ADJACENT PARTS TOUCH THE SKIN, DO NOT WASH OFF WITH WATER, SEEK IMMEDIATE MEDICAL AID FOR POSSIBLE CONTAMINATION WITH HYDROFLUORIC ACID. HYDROFLUORIC ACID IN CONTACT WITH SKIN HAS DELAYED SYMPTOMS OF CONTAMINATION. IT IS EXTREMELY TOXIC.

#### **User Instructions**

- Cleanliness is essential for trouble-free operation of the couplings. Always ensure that the blanking caps are installed when the units are disconnected.
- Periodically examine the couplings for contamination, evidence of leakage and damage. Clean the couplings, as necessary, with lint-free cloth or a soft bristle brush moistened with a suitable cleaning agent; pay particular attention to the hose unit seal and the tank unit seal recess.

#### Repair

- Repair of the couplings is by replacement of faulty seals and worn or damaged components. Repair procedures are straightforward and no special tools are required. Refer to the exploded views and the following outline procedures for guideance.

#### Dismantling notes

- Hose units: Separate the hose connector (14) from the cam (19) by removing the plug (12) and rotating the cam to release the ball bearings (13); collect the cam rollers (7). Remove the cap nuts and spring washers and remove the three bayonet roller assemblies (3) from the cam. Remove the spanner ring assy (6) and the valve components from the cam. Remove the pin (8) to separate the valve (10) from the connecting rod (9).
- Tank units: The valve in the tank unit is spring loaded and care must be taken to avoid injury when removing the valve guide assy. Hold the valve guide (24) in place and carefully remove the circlip (23). Allow the spring to expand slowly, and remove the valve guide, spring (25) and valve assembly (27).

### Cleaning and Inspection

- Clean all metal components using lint-free cloth moistened with a suitable non-toxic cleaning fluid. Ensure that residues of seal material are removed from O-ring seal grooves and from all sealing faces; use find grade wire wool, if necessary.
- Examine all parts for damage, evidence of wear and condition of surface protection (Fluoron coated components). Discard unserviceable components together with all used seals and pins; refer to the spares list for replacement parts.

#### **Assembling**

- Assemble the units in the reverse order of dismantling and note the following:
- Exercise care when installing O-ring seals in 'dovetail' grooves; use a suitable lubricant if necessary, and wipe off any excess after assembly.
- When installing the spanner ring assembly in the hose unit, ensure that the stops are positioned under the bayonet roller locations.
- Ensure that the handle (if fitted) is correctly orientated on the hose unit.
- The Nyloc nut securing the seal support plate in the tank unit blanking cap must be slackened approximately one turn to allow the seal plate to rotate in the cap.

#### Testing

 Couple the repair unit to a serviceable hose or tank unit as appropriate and check for correct operation of the valve actuating and bayonet locking mechanism. Couple and uncouple the unit(s) several times.