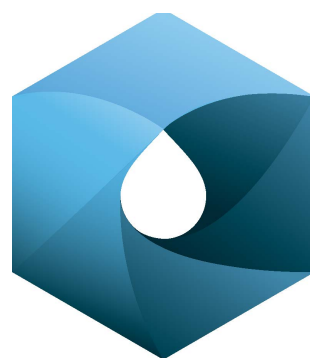




JCS
GROUP

JCS Group - Valves

JCS Group products are manufactured and engineered to exact specifications. Our Products meet or exceed the OEM's material specifications. Material Certifications are kept on all products and are available upon request.

JCS Group replacement parts are completely interchangeable with OEM components.

We offer quality products at very competitive prices. Our large inventory enables us to promptly fill orders.

Product Index

VALVES

Plug Valves
Relief Valves
Choke Valves
FC Gate Valves
Mud Gate Valves
Trunnion Valve

GATE VALVE AND REPLACEMENT PARTS

CAMERON⁺ Style 'F' & 'FC' Manual Valve
CAMERON⁺ Style 'F' & 'FC' Hydraulic Valve
CAMERON⁺ Style 'FL' Manual Valve
CAMERON⁺ Style 'FLS' Manual Valve

Note: Please order by OEM part numbers. OEM part numbers shown in this Catalog are for reference only, JCS Group is not affiliated with any of the above companies

+ Cameron, Shaffer and Swaco are registered trademarks of companies not affiliated with JCS Group in any way

Plug Valve



- Standard service is used up to 15,000psi and tested at 22,500psi
- H2S service is used up to 10,000psi and tested at 15,000psi
- Rugged Construction with Forged Alloy Steel Body
- Reliable Performance at high working pressure
- Bottom Entry design, Top Entry design, Easy Maintenance
- Valve Parts are Interchangeable with most major designs
- Suitable for variety of high pressure applications such as fracturing, cementing, acidizing and etc.
- Each valve is serialized
- MTR and Test Report are available at any time.
- Fig 1002 / Fig 1502 both available for 4" plug Valve



> Plug Valve Composition

NO	Item	Part No.				Q'ty
		2"×1"	2"×2"	3"×3"	4"×4"	
Ass'y	PlugValve 1502 Handle Type	P21F1101	P22F1101	P33F1101	P44F1101G (Gear Box)	-
1	Cap Screw	P21FRK108	P22FRK108	P22FRK108	P44FRK108	1
2	Flat Washer 1	P21FRK112	P22FRK112	P22FRK112	P44FRK112	1
3	Flat Washer 2	P21FRK107	P22FRK107	P22FRK107	P44FRK107	1
4	Handle Adapter	P21FRK109	P22FRK109	P22FRK109	-	-
5	Stop Bolt	P21FRK114	P22FRK114	P22FRK114	-	-
6	Stop Collar	-	P22FRK111	P22FRK111	-	-
7	Grease Fitting	3/8" NPT	GF031101	GF031101	*GF031101	1
		3/4" (safetap)	-	GF06E02101	*GF06E02101	
8	Body	P21FRK106	P22FRK106	P33FRK106	P44FRK106	1
9	Wing Nut	HU02JRK104	HU02JRK104	HU03JRK104	HU04JRK104	1
10	Segment	HU02JRK113	HU02JRK113	HU03JRK113	HU04JRK113	3
11	Retainer Ring	HU02JRK114	HU02JRK114	HU03JRK114	HU04JRK114	1
12	Lip Seal	HU02JRK115	HU02JRK115	HU03JRK115	HU04JRK115	1
13	Plug Seal	P21FRK118	P22FRK118	P22FRK118	P44FRK118	2
14	Plug	P21FRK116	P22FRK116	P33FRK116	P44FRK116	1
15	Roll Pin	P22FRK119	P22FRK119	P22FRK119	P44FRK119	2
16	Insert	P21FRK120	P22FRK120	P33FRK120	P44FRK120	2
17	Insert O-ring	P21FRK115	P22FRK115	P33FRK115	P44FRK115	2
18	Adjusting Nut O-ring	P21FRK117	P22FRK117	P33FRK117	P44FRK117	1
19	Adjusting Nut	P21FRK113	P22FRK113	P33FRK113	P44FRK113	1

* Two(2) grease fitting for 4" Plug Valve [3/4" Safetap grease fitting : Option]

> Plug Valve Repair Kit Composition

NO	Item	Part No.				Q'ty
		2"×1"	2"×2"	3"×3"	4"×4"	
-	Repair kit Set	P21FRK130	P22FRK130	P33FRK130	P44FRK130	-
13	Plug Seal	P21FRK118	P22FRK118	P22FRK118	P44FRK118	2
14	Plug	P21FRK116	P22FRK116	P33FRK116	P44FRK116	1
16	Insert	P21FRK120	P22FRK120	P33FRK120	P44FRK120	2
17	Insert O-ring	P21FRK115	P22FRK115	P33FRK115	P44FRK115	2
18	Adjusting Nut O-ring	P21FRK117	P22FRK117	P33FRK117	P44FRK117	1

· Seal Kit Contains No. 13, 17 and 18.



> Top Entry Plug Valve

Size	Service	Working Pressure	OperationType	A	B	C	D	Weight(kg)	Part Number
2"	Standard	2,000 ~15,000	Spring	13.33	6.06	6.06	1.75	24.5	RE02F1101
	H2S							24.5	RE02F1201

Choke Valve



Choke Valve 2" 1502 Positive



Choke Valve 2" 1502 Adjustable



Choke Valve 3" 1502 Adjustable

- 2" Fig 1502 MxF with 3/4" or 1" Orifice and 3" Fig 1502 MxF with 2" Orifice
- Standard service is used up to 15,000psi and tested at 22,500psi
- H₂S service is used up to 10,000psi and tested at 15,000psi
- Hammer Union End Connection
- Forged alloy steel body, stainless steel and tungsten carbide parts
- Parts are interchangeable with major brands.
- Suitable for a broad range of applications including wellheads, well testing, stream injection, choke and kill manifolds and well clean operations, etc.

Choke Valve



Positive Choke Valve



> 2" Positive Choke Valve Composition

NO	Item	Part No.	Q'ty
		2"×2"	
Ass'y	Positive Choke Valve 1502	CV02F2101	1
14	Wing Nut	HU02JRK104	3
15	Lip Seal	HU02JRK115	3
16	Choke Body	CV02FRK181	1
17	Plug Stem	CV02FRK147	1
18	Stem Cap	CV02FRK120	1
19	Retainer Ring	HU02JRK114	2
20	Segment	HU02JRK113	6
24	Choke Bean	CV02FRK151	1
22	Choke Saver	CV02FRK122	1
25	Blind Male Sub	HU02JRK109	1

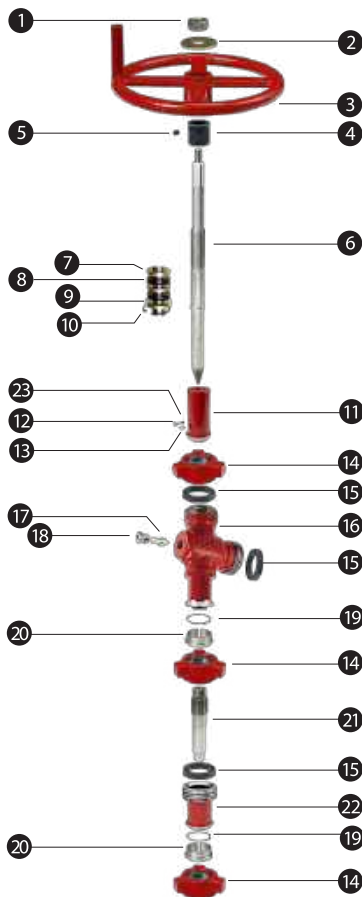
> 2" Positive Choke Valve Repair Kit Composition

NO	Item	Part No.	Q'ty
		2"×2"	
24	Choke Bean	CV02FRK151	1

2" Choke Valve



Adjustable Choke Valve



> 2" djustable Choke Valve Composition

NO	Item	Part No.	Q'ty
		2"×2"	
Ass'y	Adjustable Choke Valve	CV02F11011	1
1	Stem Nut	CV02FRK106	1
2	Washer	CV02FRK107	1
3	Hand Wheel	CV02FRK108	1
4	Indicator	CV02FRK109	1
5	Lock Screw	CV02FRK110	1
6	Choke Stem	CV02FRK111	1
7	Stem Guide	CV02FRK112	2
8	Stem Seal	CV02FRK113	2
9	Junk Ring	CV02FRK114	1
10	Snap Ring	CV02FRK115	1
11	Choke Bonnet	CV02FRK116	1
12	Thumb Screw	CV02FRK117	1
13	Grease Fitting	CV02FRK129	1
14	Wing Nut	HU02JRK104	3
15	Lip Seal	HU02JRK115	3
16	Choke Body	CV02FRK118	1
17	Plug Stem	CV02FRK147	1
18	Stem Cap	CV02FRK120	1
19	Retainer Ring	HU02JRK114	2
20	Segment	HU02JRK113	6
21	Choke Seat 3/4" HL	CV02FRK130	1
22	Choke Saver	CV02FRK122	1
23	Lock Plug	CV02FRK134	1

> 2" djustable Choke Valve Repair Kit Composition

NO	Item	Part No.	Q'ty
		2"×2"	
-	Repair Kit Set	CV02FRK1521	-
6	Choke Stem	CV02FRK111	1
7	Stem Guide	CV02FRK112	2
8	Stem Seal	CV02FRK113	2
9	Junk Ring	CV02FRK114	1
10	Snap Ring	CV02FRK115	1
21	Choke Seat 3/4" HL	CV02FRK130	1

· Seat size can be changed as customer's requirements.

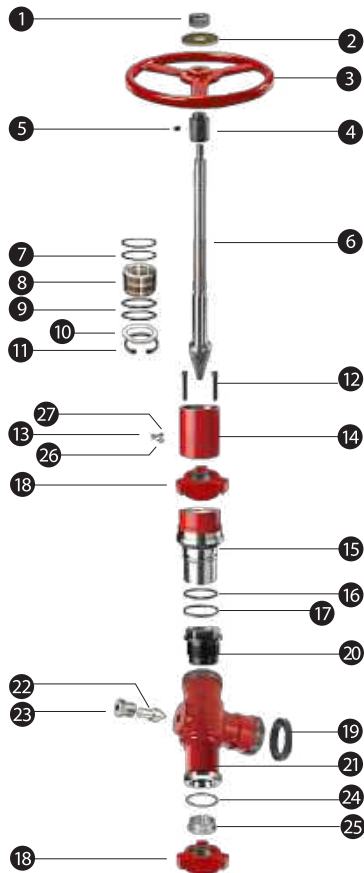
3" Choke Valve



Adjustable Choke Valve

> 3" Adjustable Choke Valve Composition

NO	Item	Part No.	Q'ty
		2"×2"	
Ass'y	Adjustable Choke Valve 1502	CV03F1101	1
1	Stem Nut	CV03FRK106	1
2	Washer	CV03FRK107	1
3	Hand Wheel	CV03FRK108	1
4	Indicator	CV03FRK146	1
5	Lock Screw	CV03FRK110	1
6	Choke Stem	CV03FRK111	1
7	Outsider O-ring	CV03FRK123	2
8	Seal Piston	CV03FRK125	1
9	Inside O-ring	CV03FRK124	2
10	Stem Seal	CV03FRK113	1
11	Snap Ring	CV03FRK115	1
12	Bonnet Bolt	CV03FRK144	2
13	Thumb Screw	CV03FRK117	1
14	Bonnet Extension	CV03FRK126	1
15	Choke Bonnet	CV03FRK116	1
16	Bonnet O-ring	CV03FRK127	1
17	Bonnet Back Up Ring	CV03FRK145	1
18	Wing Nut	HU03JRK104	2
19	Lip Seal	HU03JRK115	1
20	Choke Seat	CV03FRK135	1
21	Choke Body	CV03FRK118	1
22	Plug Stem	CV03FRK147	1
23	Stem Cap	CV03FRK120	1
24	Retainer Ring	HU03JRK114	1
25	Segment	HU03JRK113	3
26	Grease Fitting	CV02FRK129	1
27	Lock Plug	CV02FRK134	1



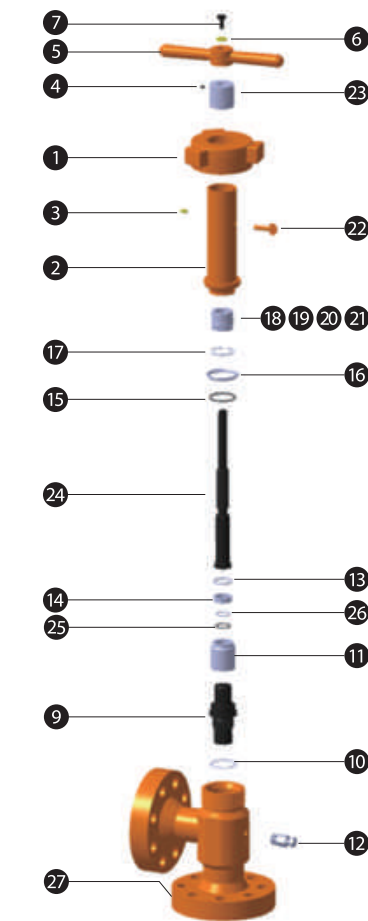
> 3" Adjustable Choke Valve Repair Kit Composition

NO	Item	Part No.	Q'ty
		3"×3"	
-	Repair Kit Set	CV03FRK152	-
6	Chock Stem	CV03FRK111	1
7	Outsider O-ring	CV03FRK123	2
8	Seal Piston	CV03FRK125	1
9	Inside O-ring	CV03FRK124	2
10	Stem Seal	CV03FRK113	1
11	Snap Ring	CV03FRK115	1
16	Bonnet O-ring	CV03FRK127	1
17	Bonnet Back Up Ring	CV03FRK145	1
20	Choke Seat	CV03FRK135	1

Production Choke

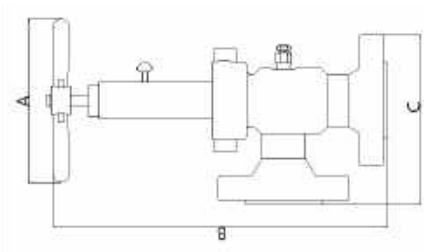


- Production chokes including our high performance cage and sleeve and needle and seat designs.
- Field Convertable from positive to adjustable.
- A variety of configurations, trim and sizing options.
- Options for materials, bolting dimensions, end connections.
- Valve Parts are Interchangeable with most major designs.
- MTR and Test Reports are available at any time.



> 2 1/16" Flange Choke Valve

NO	Item	Part No.	Q'ty
		2 1/16"	
Ass'y	Flange Choke Valve	FC11D12A1	-
1	Wing Nut	FC11DRK101	1
2	Bonnet	FC11DRK102	1
3	Grease Fittings	FC11DRK103	1
4	Set Screw	FC11DRK104	1
5	Handle	FC11DRK105	1
6	Washer	FC11DRK106	1
7	Bolt	FC11DRK107	1
8	Cap	FC11DRK108	1
9	Seat	FC11DRK109	1
10	Washer	FC11DRK110	1
11	Seat Cap	FC11DRK111	1
12	Drain Valve	FC11DRK112	1
13	Retainer Ring	FC11DRK113	2
14	Stem Insert	FC11DRK114	2
15	Spring Ring	FC11DRK115	1
16	Joint Ring	FC11DRK116	1
17	Sanp Ring	FC11DRK117	1
18	Seal Cover 2	FC11DRK118	1
19	Seal	FC11DRK119	1
20	Seal Bracket	FC11DRK120	1
21	Seal Cover 1	FC11DRK121	1
22	Lock Bolt	FC11DRK122	1
23	Indicator	FC11DRK123	1
24	Stem	FC11DRK124	1
25	O-Ring	FC11DRK125	1
26	Back-UP-O-Ring	FC11DRK126	1
27	Body	FC11DRK127	1

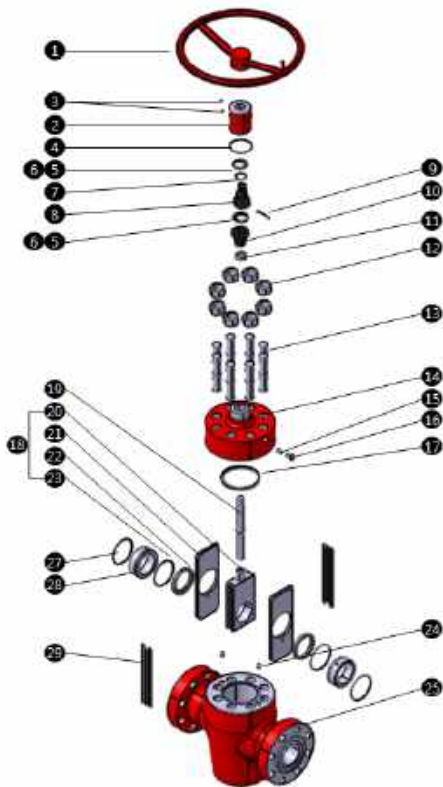


Size	Service	Working Pressure	Pressure Class	End Connection					
2 1/16"	Standard / H ₂ S	3,750	# 1,500	5K 2 1/16 Flange	267.8	547.4	277.4	41.7	FC11D12A1

Gate Valve



FC Gate Valve



> FC Type Gate Valve

NO	Item	Q'ty
1	Handle Wheel	1
2	Bearing Cap	1
3	Cap Grease Fitting	2
4	Cap O-Ring	1
5	Bearing Race	4
6	Thrust Bearing	2
7	Adapter O-Ring	1
8	Stem Adapter	1
9	Stem Pin	1
10	Packing Grand	1
11	Stem Packing	1
12	Bonnet Nut	8
13	Bonnet Stud	8
14	Bonnet	1
15	Check Valve	1
16	Body Grease Fitting	1
17	Bonnet Seal	1
18	Gate / Seat Assembly	1
19	Stem	1
20	Gate	1
21	Retainer Plate	2
22	Seat Ring(Frant Seal)	2
23	Seat Seal Ring	2
24	Locating pin	2
25	Body	1
26	Name Plate	1
27	Body Bushing Seal	2
28	Body Bushing(Vear Seal)	2
29	Guide	2

> Flanged 5,000 psi Working Pressure

Unit : (inch)

Valve Size	A	B	C	D	E	Weight(kg)
2 1/16"	2.09	14.06	4.23	19.0	11.81	80.0
4 1/16"	4.28	21.61	6.10	22.39	18.50	256.0

> Flanged 10,000 psi Working Pressure

Unit : (inch)

Valve Size	A	B	C	D	E	Weight(kg)
2 1/16"	2.09	20.51	3.94	19.0	11.81	119.0
3 1/16"	3.09	24.37	5.31	20.72	15.75	223.0
4 1/16"	4.09	26.38	6.20	23.71	18.5	378.0

Gate Valve Minor & Major Repair Kit



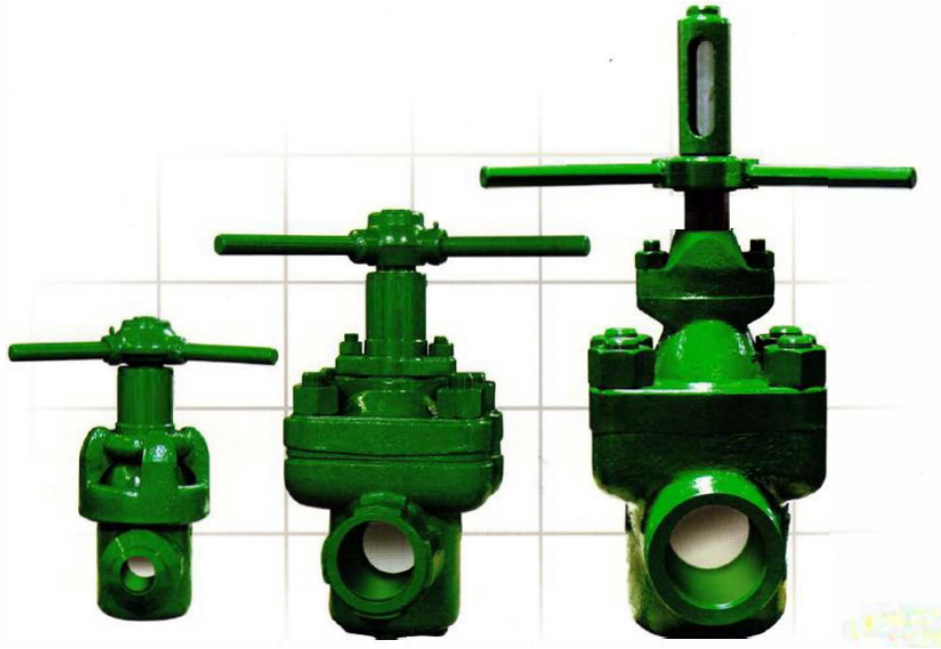
> Minor Repair Kit FC Type Gate Valve

NO	Item	Q'ty
1	Gate Clip	1
2	Body Wear Ring	2
3	Wear Ring Seal	2
4	Bonnet Seal	1
5	Gate	1
6	Seat	1

> Major Repair Kit FC Type Gate Valve

NO	Item	Q'ty
1	Stem Screw	1
2	Housing Seal	1
3	Stem	1
4	Secondary Seal	1
5	Stem Seal Assembly	1
6	Gate clip	1
7	Body Wear Ring	2
8	Wear Ring Seal	2
9	Bonnet Seal	1
10	Gate	1
11	Seat	1

Mud Gate Valve



MODEL DM GATE VALVES

Models:	DM Style Gate Valves
Sizes:	2inch, 3inch, 4inch and 5 inch
Pressures:	2000, 3000, 5000
Service Types:	Standard, Sour Gas, Cold Service and High Pressure
Temp. Rating:	-20 F to 250 F
Connections:	Threaded, Buttweld, Flanged and Union

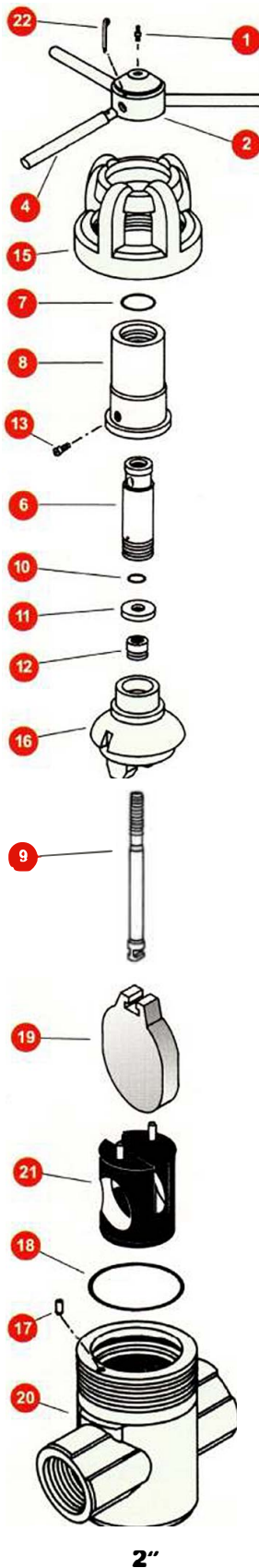
MODEL DM OVERVIEW

DM series fits the bill for low-cost valve operation. Made from high strength weldable alloys and corrosion resistant components, this water, oil and gas gate valve provides ease of in-line repairs. The DM valve is offered with working pressure rating up to 5000 PSI, with standard or sour gas trim options, and 90 durometer main seals.

MODEL DM FEATURES & BENEFITS

- o Extended Body Stud thread engagement
- o Corrosion resistant gate and stem
- o High Strength steel inserts
- o Tight fit tolerances
- o Working pressure ratings up to 5000 psi
- o Available with standard or sour gas trim.

Mud Gate Valve



> 2" 3000-5000

NO	Item	Q'ty
1	Lube Fitting	1
2	Hub Assembly	1
4	Lock Handle	3
6	Stem Screw	1
7	Stem Screw Seal	1
8	Screw Housing	1
9	Stem	1
10	Secondary Seal	1
11	Retainer	1
12	Stem Seal Assembly	1
13	Lock Screw	1
15	Coupling	1
16	Bonnet	1
17	Index Pin	1
18	Bonnet Seal	1
19	Gate	1
20	Body Uncoated	1
21	Seat	1
22	Pin Lock Handle	1

> Minor Repair Kit Mud Gate Valve

Items	18, 19, 21
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> Major Repair Kit Mud Gate Valve

Items	7, 9, 10, 11, 12, 18, 19, 21
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Mud Gate Valve

> 3" 3000-5000

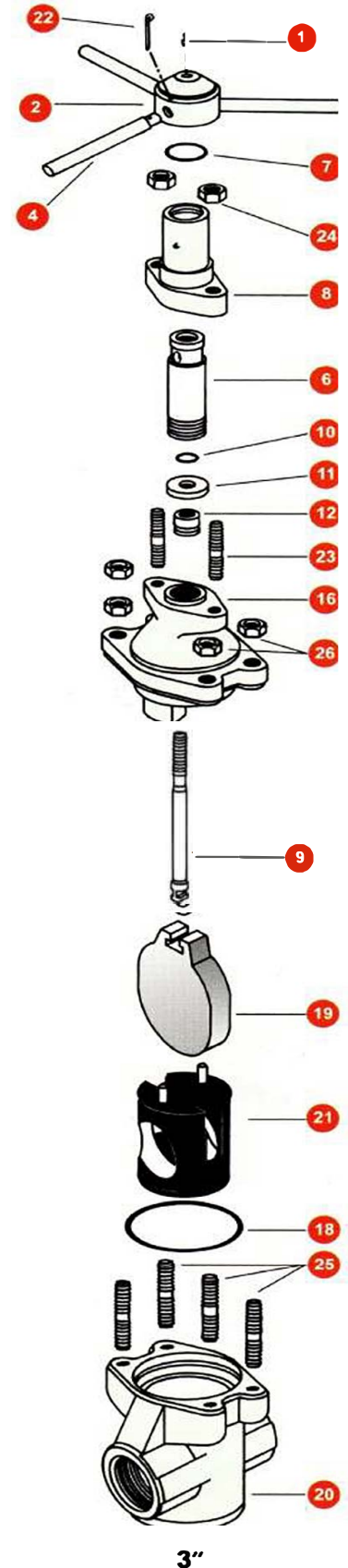
NO	Item	Q'ty
1	Lube Fitting	1
2	Hub Assembly	1
4	Lock Handle	3
6	Stem Screw	1
7	Stem Screw Seal	1
8	Screw Housing	1
9	Stem	1
10	Secondary Seal	1
11	Retainer	1
12	Stem Seal Assembly	1
16	Bonnet	1
18	Bonnet Seal	1
19	Gate	1
20	Body Uncoated	1
21	Seat	1
22	Pin Lock Handle	1
23	Bonnet Stud	1
24	Body Stud Nut	1
25	Body Stud	1
26	Body Stud Nut	1

> Minor Repair Kit Mud Gate Valve

Items	18, 19, 21
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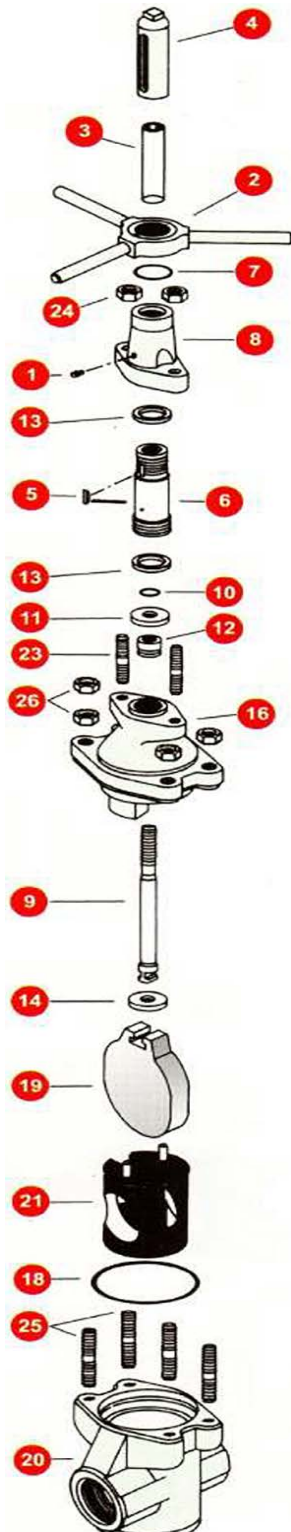
> Major Repair Kit Mud Gate Valve

Items	7, 9, 10, 11, 12, 18, 19, 21
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Mud Gate Valve

> 4" - 5000



4"

NO	Item	Q'ty
1	Lube Fitting	1
2	Handle Assembly	1
3	Act Tube	1
4	Stem Cap	1
5	Key	1
6	Stem Screw	1
7	Stem Screw Seal	1
8	Screw Housing	1
9	Stem	1
10	Secondary Seal	1
11	Retainer	1
12	Stem Seal Assembly	1
13	Bearing (2)	1
14	Down Stop Ring	1
16	Bonnet	1
18	Bonnet Seal	1
19	Gate	1
20	Body Uncoated	1
21	Seat	1
23	Bonnet Stud	1
24	Bonnet Stud Nut	1
25	Body Stud	1
26	Body Stud Nut	1

> Minor Repair Kit Mud Gate Valve

Items	18, 19, 21
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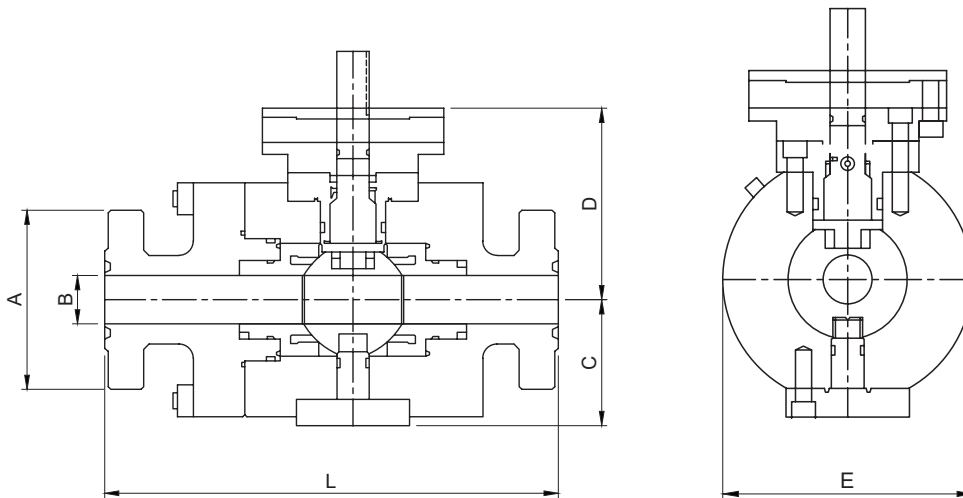
> Major Repair Kit Mud Gate Valve

Items	7, 9, 10, 11, 12, 13, 14, 18, 19, 21
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Trunnion Ball Valve



- API 6A Trunnion mounted ball valves made by AISI 4140
- Lip seals for high pressure sealing
- Metal rings for efficient fire safety



> 5,000psi

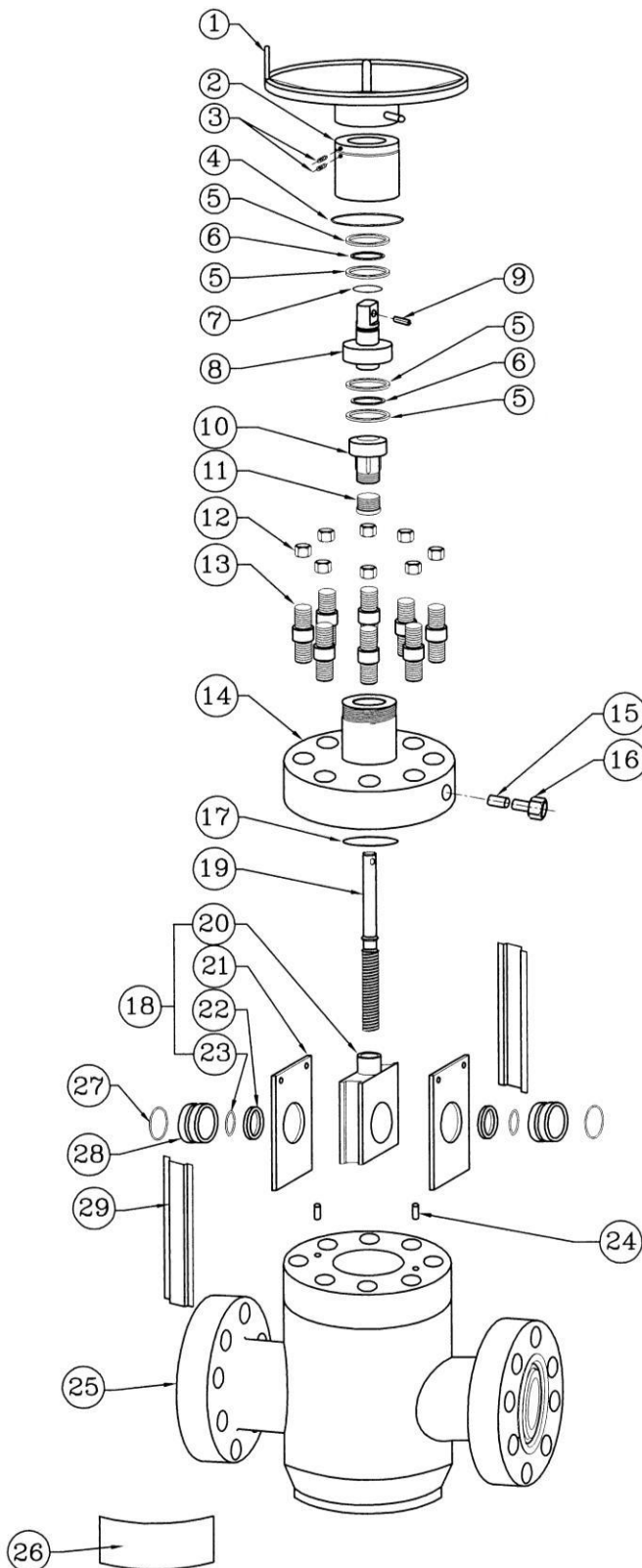
Size (inch/mm)	A (inch/mm)	B (inch/mm)	C (inch/mm)	D (inch/mm)	E (inch/mm)	L (inch/mm)	Weight (lb/kg)	Ring Number RX
2 1/16(52)	8.50/216	2.06/52.4	5.22/132.5	5.69/145	8.50/216	14.6/371	340(154)	24
3 1/8(84)	10.5/267	3.12/79.3	8.74/222	6.22/158	10.5/267	10.5/267	571(259)	35

> 10,000psi

Size (inch/mm)	A (inch/mm)	B (inch/mm)	C (inch/mm)	D (inch/mm)	E (inch/mm)	L (inch/mm)	Weight (lb/kg)	Ring Number RX
1 13/16(45)	7.4/188	1.82/46.2	5.00/127	6.77/172	7.68/195	18.27/464	209(95)	151
2 1/16(52)	7.9/200	2.06/52.4	5.75/146	8.62/219	10.47/266	20.51/521	437(198)	152

· Each size can be changed as customer's requirements.

Cameron⁺ Type 'F' & 'FC' Manual Valve



Parts List

1	Hand Wheel
2	Bearing Cap
3	Grease Fitting (Bearing Cap)
4	O-Ring
5	Bearing Race
6	Thrust Bearing
7	O-Ring (Stem Adapter)
8	Stem Adapter
9	Stem Pin
10	Packing Gland
11	Stem Packing
12	Nut
13	Stud
14	Bonnet
15	Check Valve
16	Grease Fitting
17	Bonnet Gasket***
18	Gate & Seat Assembly**
19	Stem
20	Gate*
21	Retainer Plate
22	Seat Ring*
23	Seal Ring
24	Pin
25	Body
26	Name Plate
27	Seal Ring***
28	Body Bushing***
29	Guide***

* These parts change with trim

** Also changes with trim. Consists of: Gate (1ea), Retainer Plates (2ea), Seat Rings (2ea) & Seal Rings (2ea)

*** Not Used on 'F' Type

Replacement Parts for Cameron⁺ Type 'F' & 'FC' Manual Valve 1-13/16"

Item No.	Description	Qty	10,000 PSI 'DD' Trim Regular (a) Super (b)	10,000 PSI 'EE' Trim SS Reg (a) SS Super (b)	15,000 PSI 'DD' Trim Regular (a) Super (b)	15,000 PSI 'EE' Trim SS Reg (a) SS Super (b)
			Part Number	Part Number	Part Number	Part Number
1	Handwheel	1	19937-01	19937-01	19937-03	19937-03
2	Bearing Cap	1	19106-01	19106-01	19106-01	19106-01
3	Grease Fitting (Bearing Cap)	2	5929-05	5929-05	5929-05	5929-05
4	O-Ring	1	OR-340	OR-340	OR-340	OR-340
5	Bearing Race	4	TRD2840	TRD2840	TRD2840	TRD2840
6	Thrust Bearing	2	NTA2840	NTA2840	NTA2840	NTA2840
7	O-Ring (Stem-Adapter)	1	OR-222	OR-222	OR-222	OR-222
8	Stem Adapter	1	20871-01	20871-01	20871-01	20871-01
9	Stem Pin	1	21812-14	21812-14	21812-14	21812-14
10	Packing Gland	1	20874-01	20874-01	20874-01	20874-01
11	Stem Packing	1	686598-01	686598-01	686598-01	686598-01
12	Back Up Ring	1	-	-	691889-01	691889-01
13	Nut	8	5926-25-10	5926-25-10	5926-25-10	5926-25-10
14	Stud	8	5914-21-10	5914-21-10	5914-21-10	5914-21-10
15	Bonnet	1	BONNET-FCM1131610	BONNET-FCM1131610	BONNET-FCM11316-15	BONNET-FCM11316-15
16	Check Valve	1	678627-01-99	678627-01-99	678627-01-99	678627-01-99
17	Grease Fitting	1	5929-25	5929-55	5929-55-916-AUTOCLAVE	5929-55-916-AUTOCLAVE
18	Bonnet Gasket (TYPE 'F')	1	19141-06	19141-06	19141-06	19141-06
19	Bonnet Gasket (TYPE 'FC')	1	44671-01	44671-01	44671-01	44671-01
20a	Gate & Seat Assembly (Regular)	1		21353-17-02		21353-17-03
20b	Gate & Seat Assembly (Super)	1	21353-17-16	21353-17-36	21353-17-16	21353-17-36
21	Stem	1	29381-01	29381-01	29381-01	29381-01
22a	Gate (Regular Trim)	1	23039-02-R	19797-03	23039-02-R	19797-03
22b	Gate (Super Trim)	1	23039-02-S	19797-03-SS-ST	23039-02-S	19797-03-SS-ST
23	Retainer Plate	2	611404-09	611404-09	611404-09	611404-09
24	Seat Ring (Super Trim)	2	611527-01-S	611527-01-S	611527-01-S	611527-01-S
25	Seal Ring	2	610500-49	610500-49	610500-49	610500-49
26	Pin		-	-	-	-
27	Body	1	BODY-FCM1131610	BODY-FCM1131610	BODY-FCM11316-15	BODY-FCM11316-15
28	Name Plate	1	19052-01	19052-01	19052-01	19052-01
29	Seal Ring	2	610500-49	610500-49	610500-49	610500-49
30	Body Bushing	2	630693-02	630693-02	630693-02	630693-02
31	Guide	2	694811-01	694811-01	694811-01	694811-01

Replacement Parts for Cameron⁺ Type ‘F’ & ‘FC’ Manual Valve 2-1/16”

Item No.	Description	Qty	5,000 PSI ‘DD’ Trim Regular (a) Super (b)	5,000 PSI ‘EE’ Trim SS Regular (a) SS Super (b)	10,000 PSI ‘DD’ Trim Regular (a) Super (b)	10,000 PSI ‘EE’ Trim SS Regular (a) SS Super (b)	15,000 PSI ‘DD’ Trim Regular (a) Super (b)	15,000 PSI ‘EE’ Trim SS Regular (a) SS Super (b)
			Part Number	Part Number	Part Number	Part Number	Part Number	Part Number
1	Handwheel	1	19937-01	19937-01	19937-03	19937-03	19937-03	19937-03
2	Bearing Cap	1	19106-01	19106-01	19106-01	19106-01	19106-01	19106-01
3	Grease Fitting (Bearing Cap)	2	5929-05	5929-05	5929-05	5929-05	5929-05	5929-05
4	O-Ring	1	OR-340	OR-340	OR-340	OR-340	OR-340	OR-340
5	Bearing Race	4	TRD2840	TRD2840	TRD2840	TRD2840	TRD2840	TRD2840
6	Thrust Bearing	2	NTA2840	NTA2840	NTA2840	NTA2840	NTA2840	NTA2840
7	O-Ring (Stem-Adapter)	1	OR-222	OR-222	OR-222	OR-222	OR-222	OR-222
8	Stem Adapter	1	20871-01	20871-01	20871-01	20871-01	20871-01	20871-01
9	Stem Pin	1	21812-14	21812-14	21812-14	21812-14	21812-14	21812-14
10	Packing Gland	1	20874-01	20874-01	20874-01	20874-01	20874-01	20874-01
11	Stem Packing	1	686598-01	686598-01	686598-01	686598-01	686598-01	686598-01
12	Back Up Ring	1	—	—	—	—	691889-01	691889-01
13	Nut	8	5926-09-10	5926-09-10	5926-25-10	5926-25-10	5926-23-10	5926-23-10
14	Stud	8	5912-67-10	5912-67-10	5914-18-10	5914-18-10	5915-67-10	5915-67-10
15	Bonnet	1	BONNET-FCM21165	BONNET-FCM21165	BONNET-FCM211610	BONNET-FCM211610	BONNET-FCM2116-15	BONNET-FCM2116-15
16	Check Valve	1	—	—	678627-01-99	678627-01-99	678627-01-99	678627-01-99
17	Grease Fitting	1	5929-25	5929-55	5929-25	5929-55	5929-55-916-AUTOCLAVE	5929-55-916-AUTOCLAVE
18	Bonnet Gasket	1	21793-11	21793-11	19141-07	19141-07	19141-07	19141-07
19a	Gate & Seat Assembly (Regular)	1	21353-02-01	21353-02-03	21353-02-01	21353-02-03	21353-02-01	21353-02-03
19b	Gate & Seat Assembly (Super)	1	21353-02-13	21353-02-34	21353-02-13	21353-02-34	21353-02-13	21353-02-34
20	Stem	1	29381-01	29381-01	29381-01	29381-01	29381-01	29381-01
21a	Gate (Regular Trim)	1	19798-04	19798-03	19798-04	19798-03	19798-04	19798-03
21b	Gate (Super Trim)	1	23042-02	19798-03-ST	23042-02	19798-03-ST	23042-02	19798-03-ST
22	Retainer Plate	2	611404-01	611404-01	611404-01	611404-01	611404-01	611404-01
23	Seat Ring (Super Trim)	2	44844-06-S	44844-06-S	44844-06-S	44844-06-S	44844-06-S	44844-06-S
24	Seal Ring	2	610500-23	610500-23	610500-23	610500-23	610500-23	610500-23
25	Pin	2	21813-06	21813-06	—	—	—	—
26	Body	1	BODY-FCM21165	BODY-FCM21165	BODY-FCM211610	BODY-FCM211610	BODY-FCM2116-15	BODY-FCM2116-15
27	Name Plate	1	19052-01	19052-01	19052-01	19052-01	19052-01	19052-01
28	Seal Ring	2	610500-23	610500-23	610500-23	610500-23	610500-23	610500-23
29	Body Bushing	2	630691-01	630691-01	630691-01	630691-01	630691-01	630691-01
30	Guide	2	694811-01	694811-01	694811-01	694811-01	694811-01	694811-01

Replacement parts for Cameron⁺ Type 'F' & 'FC' Manual Valve 2-9/16"

Item No.	Description	Qty	5,000 PSI 'DD' Trim Regular (a) Super (b)	5,000 PSI 'EE' Trim SS Regular (a) SS Super (b)	10,000 PSI 'DD' Trim Regular (a) Super (b)	10,000 PSI 'EE' Trim SS Regular (a) SS Super (b)	15,000 PSI 'DD' Trim Regular (a) Super (b)	15,000 PSI 'EE' Trim SS Regular (a) SS Super (b)
			Part Number	Part Number	Part Number	Part Number	Part Number	Part Number
1	Handwheel	1	19937-01	19937-01	19937-03	19937-03	19937-03	19937-03
2	Bearing Cap	1	19106-01	19106-01	19106-01	19106-01	19312-01	19312-01
3	Grease Fitting (Bearing	2	5929-05	5929-05	5929-05	5929-05	5929-05	5929-05
4	O-Ring	1	OR-340	OR-340	OR-340	OR-340	OR-340	OR-340
5	Bearing Race	4	TRD2840	TRD2840	TRD2840	TRD2840	TRD3244	TRD3244
6	Thrust Bearing	2	NTA2840	NTA2840	NTA2840	NTA2840	NTA3244	NTA3244
7	O-Ring (Stem-Adapter)	1	OR-222	OR-222	OR-222	OR-222	OR-222	OR-222
8	Stem Adapter	1	20871-01	20871-01	20871-01	20871-01	20873-01	20873-01
9	Stem Pin	1	21812-14	21812-14	21812-14	21812-14	21812-15	21812-15
10	Packing Gland	1	20874-01	20874-01	20874-01	20874-01	20890-01	20890-01
11	Stem Packing	1	686598-01	686598-01	686598-01	686598-01	666853-02	666853-02
12	Back Up Ring	1	—	—	—	—	691889-02	691889-02
13	Nut	8	5926-10-10	5926-10-10	5926-23-10	5926-23-10	5926-25-10	5926-25-10
14	Stud	8	5915-60-10	5915-60-10	5915-40-10	5915-40-10	5926-10	5926-10
15	Bonnet	1	BONNET-FCM29165	BONNET-FCM29165	BONNET-FCM291610	BONNET-FCM291610	BONNET-FCM2916-15	BONNET-FCM2916-15
16	Check Valve	1	—	—	678627-01-99	678627-01-99	678627-01-99	678627-01-99
17	Grease Fitting	1	5929-25	5929-55	5929-25	5929-55	5929-55-916-AUTOCLAVE	5929-55-916-AUTOCLAVE
18	Bonnet Gasket ('F')	1	21793-12	21793-12	19141-08	19141-08	19141-12	19141-12
18	Bonnet Gasket ('FC')	1	21793-12	21793-12	19141-08	19141-08	19141-12	19141-12
19a	Gate & Seat Assembly (Regular Trim)	1	21353-25-03	21353-25-04	21353-25-03	21353-25-04		21353-25-05
19b	Gate & Seat Assembly (Super Trim)	1	21353-25-20	21353-25-32	21353-25-20	21353-25-32	21353-25-16	21353-25-40
20	Stem	1	29381-02	29381-02	29381-02	29381-02	38228-03-99	38228-03-99
21a	Gate (Regular Trim)	1	19799-05	19799-03	19799-05	19799-03		
21b	Gate (Super Trim)	1	23044-02	GATEFCM29165/10-SS-HF	23044-02	GATEFCM29165/10-SS-HF	23426-02	20986-03
22	Retainer Plate	2	611404-11	611404-11	611404-11	611404-11	611404-07	611404-07
23	Seat Ring (Super Trim)	2	44839-06-S	44839-06-S	44839-06-S	44839-06-S	44922-06-S	44922-06-S
24	Seal Ring	2	610500-33	610500-33	610500-33	610500-33	610500-52	610500-52
25	Pin	2	21813-06	21813-06	—	—	—	—
26	Body	1	BODY-FCM29165	BODY-FCM29165	BODY-FCM291610	BODY-FCM291610	BODY-FCM2916-15	BODY-FCM2916-15
27	Name Plate	1	19052-01	19052-01	19052-01	19052-01	19052-01	19052-01
28	Seal Ring	2	610500-33	610500-33	610500-33	610500-33	610500-52	610500-52
29	Body Bushing	2	630597-01	630597-01	630597-01	630597-01	630501-01	630501-01
30	Guide	2	235041-01	235041-01	235041-01	235041-01	44641-01	44641-01

Replacement Parts for Cameron⁺ Type 'F' & 'FC' Manual Valve 3-1/8" & 3-1/16"

Item No.	Description	Qty	5,000 PSI 'DD' Trim Regular (a) Super (b)	5,000 PSI 'EE' Trim SS Regular (a) SS Super (b)	10,000 PSI 'DD' Trim Regular (a) Super (b)	10,000 PSI 'EE' Trim SS Regular (a) SS Super (b)	15,000 PSI 'DD' Trim Regular (a) Super (b)	15,000 PSI 'EE' Trim SS Regular (a) SS Super (b)
			Part Number	Part Number	Part Number	Part Number	Part Number	Part Number
1	Handwheel	1	19937-03	19937-03	20774-02	20774-02	20774-02	20774-02
2	Bearing Cap	1	19106-01	19106-01	19106-01	19106-01	678472-01	678472-01
3	Grease Fitting (Bearing Cap)	2	5929-05	5929-05	5929-05	5929-05	5929-05	5929-05
4	O-Ring	1	OR-340	OR-340	OR-340	OR-340	OR-354	OR-354
5	Bearing Race	4	TRD2840	TRD2840	TRD2840	TRD2840	TRD4458	TRD4458
6	Thrust Bearing	2	NTA2840	NTA2840	NTA2840	NTA2840	NTA4458	NTA4458
7	O-Ring (Stem-Adapter)	1	OR-222	OR-222	OR-222	OR-222	OR-222	OR-222
8	Stem Adapter	1	20871-01	20871-01	20871-01	20871-01	678474-01	678474-01
9	Stem Pin	1	21812-14	21812-14	21812-14	21812-14	21812-60	21812-60
10	Packing Gland	1	20874-01	20874-01	20874-01	20874-01	677509-02	677509-02
11	Stem Packing	1	686598-01	686598-01	686598-01	686598-01	686598-12	686598-12
12	Back Up Ring	1	—	—	—	—	691889-03	691889-03
13	Nut	8	5926-25-10	5926-25-10	5926-24-10	5926-24-10	5926-23-10	5926-23-10
14	Stud	8	5914-21-10	5914-21-10	5917-33-10	5917-33-10	5914-95-10	5914-95-10
15	Bonnet	1	BONNET-FCM3185	BONNET-FCM3185	BONNET-FCM311610	BONNET-FCM311610	BONNET-FCM3116-15	BONNET-FCM3116-15
16	Check Valve	1	—	—	678627-01-99	678627-01-99	678627-01-99	678627-01-99
17	Grease Fitting	1	5929-25	5929-55	5929-25	5929-55	5929-55-916-AUTOCLAVE	5929-55-916-AUTOCLAVE
18	Bonnet Gasket	1	21793-27	21793-27	19141-10	19141-10	19141-13	19141-13
19a	Gate & Seat Assembly (Regular)	1	21353-03-01	21353-03-02	21353-03-01	21353-03-02		21353-03-32
19b	Gate & Seat Assembly (Super)	1	21353-03-07	21353-03-30	21353-03-07	21353-03-30	21353-25-34	21353-03-33
20	Stem	1	29381-03	29381-03	29381-03	29381-03	687853-01	687853-01
21a	Gate (Regular Trim)	1	19800-03	19800-02-SS	19800-03	19800-02-SS		
21b	Gate (Super Trim)	1	23247-02	19800-02-ST	23247-02	19800-02-ST	678253-01	677512-01
22	Retainer Plate	2	611404-03	611404-03	611404-03	611404-03	611404-15	611404-15
23	Seat Ring (Super Trim)	2	44783-06-S	44783-06-S	44783-06-S	44783-06-S	678353-01	678353-01
24	Seal Ring	2	610500-50	610500-50	610500-50	610500-50	610500-55	610500-55
25	Pin	2	21813-06	21813-06	—	—	—	—
26	Body	1	BODY-FCM3185	BODY-FCM3185	BODY-FCM311610	BODY-FCM311610	BODY-FCM3116-15	BODY-FCM3116-15
27	Name Plate	1	19052-01	19052-01	19052-01	19052-01	19052-01	19052-01
28	Seal Ring	2	610500-50	610500-50	610500-50	610500-50	610500-55	610500-55
29	Body Bushing	2	694813-01	694813-01	630469-06	630469-06	630471-02	630471-02
30	Guide	2	694482-01	694482-01	694482-01	694482-01	44640-01	44640-01

Replacement parts for Cameron⁺ Type 'F' & 'FC' Manual Valve 4-1/16"

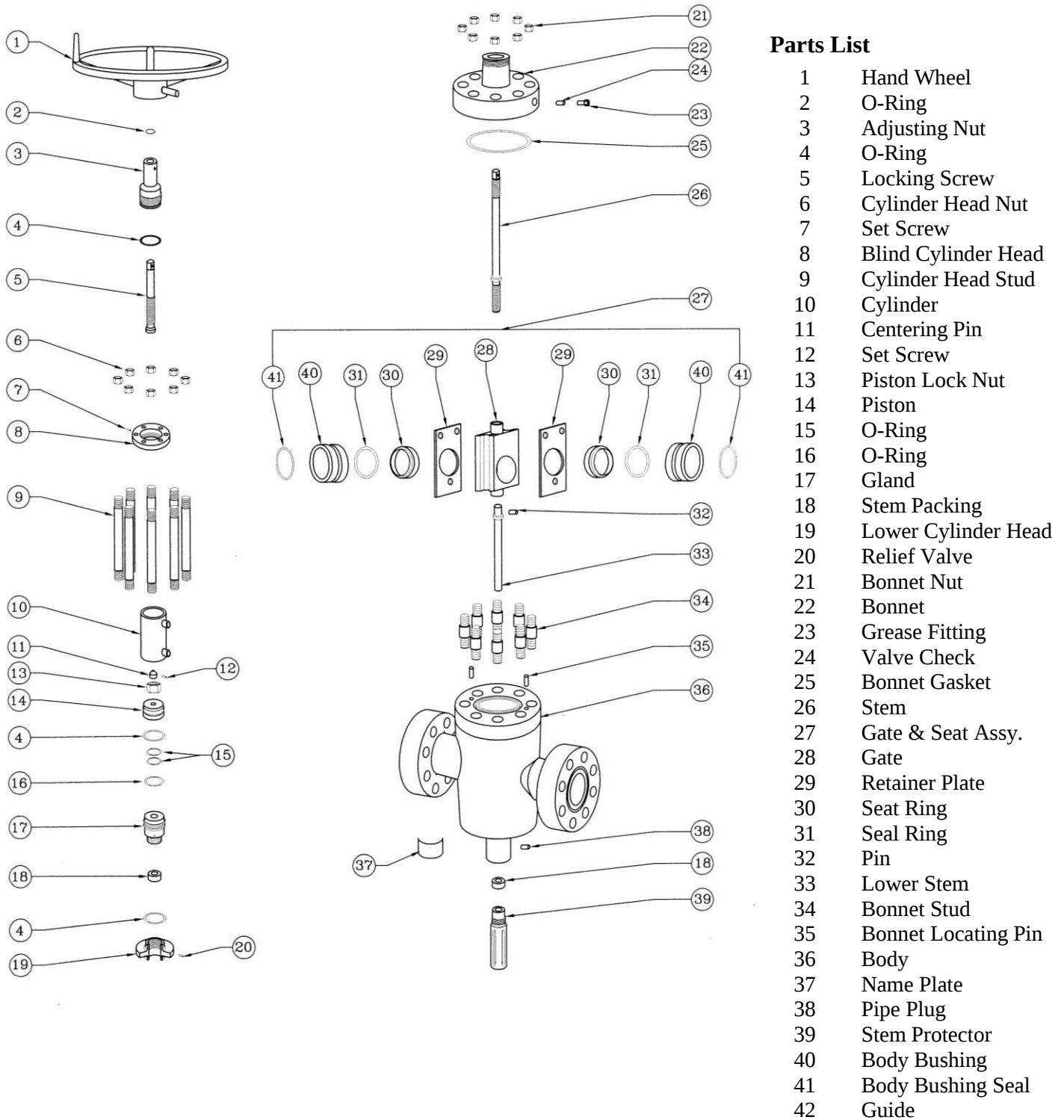
Item No.	Description	Qty	5,000 PSI 'DD' Trim Regular (a) Super (b)	5,000 PSI 'EE' Trim SS Regular (a) SS Super (b)	10,000 PSI 'DD' Trim Regular (a) Super (b)	10,000 PSI 'EE' Trim SS Regular (a) SS Super (b)	15,000 PSI 'DD' Trim Regular (a) Super (b)	15,000 PSI 'EE' Trim SS Regular (a) SS Super (b)
			Part Number	Part Number	Part Number	Part Number	Part Number	Part Number
1	Handwheel	1	19337-03	19337-03	20774-02	20774-02	20774-02	20774-02
2	Bearing Cap	1	19106-01	19106-01	19312-01	19312-01	681111-01	681111-01
3	*Grease Fitting (Bearing Cap)	2	5929-05	5929-05	5929-05	5929-05	5929-05	5929-05
4	*O-Ring	1	OR-340	OR-340	OR-340	OR-340	-	-
5	*Bearing Race	4	TRD2840	TRD2840	TRD3244	TRD3244	TRD4458	TRD4458
6	*Thrust Bearing	2	NTA2840	NTA2840	NTA3244	NTA3244	NTA4458	NTA4458
7	*O-Ring (Stem-Adapter)	1	OR-222	OR-222	OR-224	OR-224	OR-230	OR-230
8	Stem Adapter	1	20871-01	20871-01	20873-01	20873-01	681112-01	681112-01
9	*Stem Pin	1	21812-14	21812-14	21812-15	21812-15	21813-34	21813-34
10	Packing Gland	1	20874-01	20874-01	690169	690169	690164	690164
11	*Stem Packing	1	686598-01	686598-01	686598-02	686598-02	686598-12	686598-12
12	Nut	8	5926-23-10	5926-23-10	5926-27-10	5926-27-10	5926-28-10	5926-28-10
13	Stud	8	5915-67-10	5915-67-10	6306-22-10	6306-22-10	7311-06-10	7311-06-10
14	Bonnet	1	BONNET-FCM41165	BONNET-FCM41165	BONNET-FCM411610	BONNET-FCM411610	BONNET-FCM4116-15	BONNET-FCM4116-15
15	Check Valve	1	-	-	678627-01-99	678627-01-99	678627-01-99	678627-01-99
16	*Grease Fitting	1	5929-25	5929-25	5929-55	5929-55	5929-55-916-AUTOCLAVE	5929-55-916-AUTOCLAVE
17	*Bonnet Gasket	1	21794-03	21794-03	19141-11	19141-11	19141-15	19141-15
18a	Gate & Seat Assembly (Regular)	1	21353-04-01	21353-04-02		21353-04-03		21353-04-41
18b	Gate & Seat Assembly (Super)	1	21353-04-11	21353-04-55	21353-04-12	21353-04-36	21353-04-42	21353-04-43
*19	Stem	1	29381-04-99	29381-04-99	38228-01	38228-01	682564-07	682564-07
20a	Gate (Regular Trim)	1	19801-03	19801-03-SS	23249-01-R	19794-02		682255-01
*20b	Gate (Super Trim)	1	23248-01	19801-03-ST	23249-01-S	19794-02-ST	682255-02	682255-05
21	Retainer Plate	2	611404-05	611404-05	611404-17	611404-17	682257-01	682257-01
*22	Seat Ring (Super Trim)	2	610482-03-S	610482-03-S	610978-02-S	610978-02-S	611535-02	611535-02
*23	Seal Ring	2	610500-47	610500-47	610500-47	610500-47	610500-58	610500-58
24	Pin	2	21813-06	21813-06	-	-	-	-
25	Body	1	BODY-FCM41165	BODY-FCM41165	BODY-FCM411610	BODY-FCM411610	BODY-FCM4116-15	BODY-FCM4116-15
26	Name Plate	1	19052-01	19052-01	19052-01	19052-01	19052-01	19052-01
*27	Seal Ring	2	610500-47	610500-47	610500-47	610500-47	610500-58	610500-58
*28	Body Bushing	2	630472-02	630472-02	610774-02	610774-02	630706-02	630706-02
29	Guide	2	694816-01	694816-01	694406-01	694406-01	611045-01	611045-01
30	Back Up Ring	1	-	-	-	-	691889-03	691889-03

*=Recommended Spare Part

Replacement parts for Cameron⁺ Type 'F' & 'FC' Manual Valve 6-1/8" & 6-3/8"

Item No.	Description	Qty	6-1/8" 2-5,000 PSI	6-3/8" 2-5,000 PSI
			'DD' Trim Regular Trim (a) Super Trim (b)	'DD' Trim Regular (a) Super (b)
			Part Number	Part Number
1	Handwheel	1	20774-02	20774-02
2	Grease Fitting (Bearing Cap)	2	5929-05	5929-05
3	Bearing Cap	1	19312-01	19312-01
4	Bearing Cap Oring	1	OR-340	OR-340
5	Bearing Race	4	TRD3244	TRD3244
6	Thrust Bearing	2	NTA3244	NTA3244
7	O-Ring (Stem-Adapter)	1	OR-224	OR-224
8	Stem Adapter	1	20873-01	20873-01
9	Stem Pin	1	21812-15	21812-15
10	Packing Gland	1	690169	690169
11	Stem Packing	1	686598-02	686598-02
12	Stud	8	---	---
13	Nut	8	---	---
14	Bonnet	1	---	---
15	Check Valve	1	NA	NA
16	Grease Fitting	1	5929-55	5929-55
17	Bonnet Gasket	1	140171-06-02-04	140171-06-02-04
18a	Gate & Seat Assy (Regular)	1	21353-06-01	21353-06-18
18b	Gate & Seat Assy (Super)		21353-06-04	21353-06-15
19	Stem	1	140151-02-03-01	140151-02-03-01
20a	Gate (Regular)	1	21353-06-01-GATE	21353-06-18-GATE
20b	Gate (Super)	1	21353-06-04-GATE	21353-06-15-GATE
21	Retainer Plate	1	611404-13	611404-13
22a	Seat Ring (Regular)	2	15394-13-R	21353-06-18-SEAT
22b	Seat Ring (Super)	2	15394-13-S	21353-06-15-SEAT
23	Seal Ring	2	14719-48	14719-48
24	Pin	1	---	---
25	Body	1	---	---
26	Name Plate	1	---	---
27	Seal Ring		14719-48	14719-48
28	Body Bushing		630742-02	631036-01
29	Guide		696046-01	690046-01

Cameron⁺ Style 'F' & 'FC' Hydraulic Valve



Replacement parts for Cameron⁺ Type 'F' & 'FC' Hydraulic Valve 2-1/16"

Item No	Description	Qty	5,000 PSI 'DD' Trim Regular (a) Super (b)	5,000 PSI 'EE' Trim SS Regular (a) SS Super (b)	10,000 PSI 'DD' Trim Regular (a) Super (b)	10,000 PSI 'EE' Trim SS Regular (a) SS Super (b)	15,000 PSI 'DD' Trim Regular (a) Super (b)	15,000 PSI 'EE' Trim SS Regular (a) SS Super (b)
			Part Number	Part Number	Part Number	Part Number	Part Number	Part Number
1	Handwheel	1	19937-01	19937-01	19937-03	19937-03	19937-03	19937-03
2	O-Ring	1	OR-222	OR-222	OR-222	OR-222	OR-222	OR-222
3	Adjusting Nut	1	22936-01	22936-01	22936-01	22936-01	22936-01	22936-01
4	O-Ring	3	OR-344	OR-344	OR-344	OR-344	OR-344	OR-344
5	Locking Screw	1	18597-01	18597-01	18597-01	18597-01	18597-01	18597-01
6	Cylinder Head Nut	6	5926-08	5926-08	5926-08	5926-08	5926-08	5926-08
7	Set Screw	2	5940-06	5940-06	5940-06	5940-06	5940-06	5940-06
8	Blind Cylinder Head	1	22939-01	22939-01	22939-01	22939-01	22939-01	22939-01
9	Cylinder Head Stud	6	5911-48	5911-48	5911-48	5911-48	5911-48	5911-48
10	Cylinder	1	20459-04	20459-04	20459-04	20459-04	20459-04	20459-04
11	Centering Pin	1	18596-01	18596-01	18596-01	18596-01	18596-01	18596-01
12	Set Screw	1	5940-01-01-04	5940-01-01-04	5940-01-01-04	5940-01-01-04	5940-01-01-04	5940-01-01-04
13	Piston Lock Nut	1	5953-05	5953-05	5953-05	5953-05	5953-05	5953-05
14	Piston	1	20582-01	20582-01	20582-01	20582-01	20582-01	20582-01
15	O-Ring	2	OR-214	OR-214	OR-214	OR-214	OR-214	OR-214
16	O-Ring	1	OR-333	OR-333	OR-333	OR-333	OR-333	OR-333
17	Gland	1	20454-02	20454-02	20454-02	20454-02	20454-02	20454-02
18	Stem Packing	2	686598-01	686598-01	686598-01	686598-01	686598-01	686598-01
19	Lower Cylinder Head	1	20583-1	20583-1	20583-1	20583-1	20583-1	20583-1
20	Relief Valve	1	5929-10	5929-10	5929-10	5929-10	5929-10	5929-10
21	Bonnet Nut	8	5926-09-10	5926-09-10	5926-25-10	5926-25-10	5926-23-10	5926-23-10
22	Bonnet	1	BONNET-FCM21165	BONNET-FCM21165	BONNET-FCM211610	BONNET-FCM211610	BONNET-FCM2116-15	BONNET-FCM2116-15
23	Grease Fitting	1	5929-55	5929-55	5929-55	5929-55	5929-55-916-AUTOCLAVE	5929-55-916-AUTOCLAVE
24	Valve Check	-	-	-	678627-01-99	678627-01-99	678627-01-99	678627-01-99
25	Bonnet Gasket	1	21793-11	21793-11	19141-07	19141-07	19141-07	19141-07
26	Stem	1	34272-01	34272-01	34272-01	34272-01	34272-01	34272-01
27a	Gate & Seat Assy (R. Trim)	1						
27b	Gate & Seat Assy (S. Trim)	1	21436-02-04		21436-02-04		21436-02-04	
28a	Gate (Regular Trim)	1	29786-01-R	29786-01-SS	29786-01-R	29786-01-SS	29786-01-R	29786-01-SS
28b	Gate (Super Trim)	1	29786-01-S	29786-01-SS-ST	29786-01-S	29786-01-SS-ST	29786-01-S	29786-01-SS-ST
29	Retainer Plate	2	611404-01	611404-01	611404-01	611404-01	611404-01	611404-01
30	Seat Ring (Super Trim)	2	44844-06-S	44844-06-S	44844-06-S	44844-06-S	44844-06-S	44844-06-S
31	Seal Ring	2	610500-23	610500-23	610500-23	610500-23	610500-23	610500-23
32	Pin	1	21812-52	21812-52	21812-52	21812-52	21812-52	21812-52
33	Lower Stem	1	34271-02	34271-02	34271-02	34271-02	34271-02	34271-02
34	Bonnet Stud	8	5912-67-10	5912-67-10	5914-18-10	5914-18-10	5915-67-10	5915-67-10
35	Bonnet locating Pin	2	21813-06	21813-06	-	-	-	-
36	Body	1	BODY-FCHY21165	BODY-FCHY21165	BODY-FCHY211610	BODY-FCHY211610	BODY-FCHY2116-15	BODY-FCHY2116-15
37	Name Plate	1	19052	19052	19052	19052	19052	19052
38	Pipe Plug	1	5930-01 1/2"	5930-01 1/2"	5930-01 1/2"	5930-01 1/2"	5930-01 1/2"	5930-01 1/2"
39	Stem Protector	1	20460-02	20460-02	20460-02	20460-02	20460-02	20460-02
40	Body Bushing	2	630691-01	630691-01	630691-01	630691-01	630691-01	630691-01
41	Body Bushing Seal	2	610500-23	610500-23	610500-23	610500-23	610500-23	610500-23
42	Guide	2	694811-01	694811-01	694811-01	694811-01	694811-01	694811-01
44	Back-Up Ring	1	-	-	-	-	691889-01	691889-01

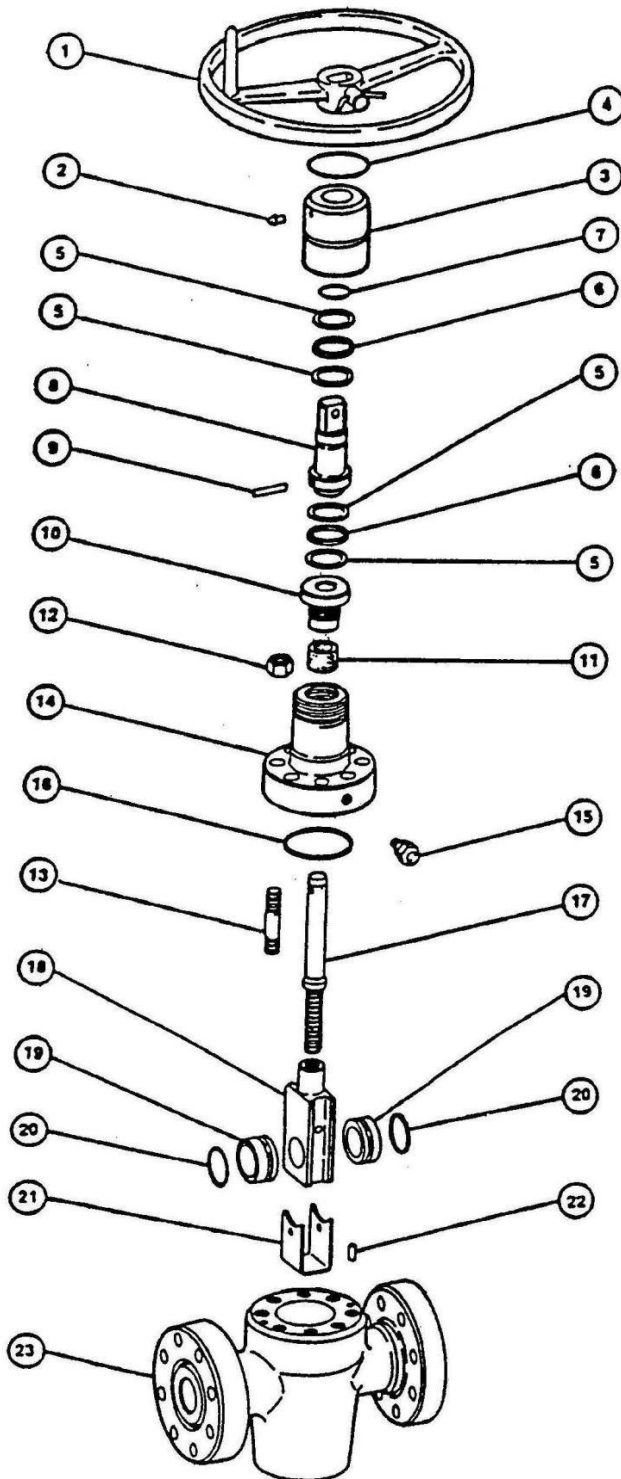
Replacement parts for Cameron⁺ Type 'F' & 'FC' Hydraulic Valve 3-1/8", 3-1/16"

Item No	Description	Qty	5,000 PSI 'DD' Trim Regular (a) Super (b)	5,000 PSI 'EE' Trim SS Regular (a) SS Super (b)	10,000 PSI 'DD' Trim Regular (a) Super (b)	10,000 PSI 'EE' Trim SS Regular (a) SS Super (b)	15,000 PSI 'DD' Trim Regular (a) Super (b)	15,000 PSI 'EE' Trim SS Regular (a) SS Super (b)
			Part Number	Part Number	Part Number	Part Number	Part Number	Part Number
1	Handwheel	1	20774-02	20774-02	20774-02	20774-02	19937-03	19937-03
2	O-Ring	1	OR-222	OR-222	OR-222	OR-222	OR-325	OR-325
3	Adjusting Nut	1	22948-01-5M	22948-01-5M	22948-01-10M	22948-01-10M	689724-00	689724-00
4	O-Ring	3	OR-345	OR-345	OR-348	OR-348	OR-434	OR-434
5	Locking Screw	1	18597-03	18597-03	18597-03	18597-03	18597-06	18597-06
6	Cylinder Head Nut	6	5926-08	5926-08	5926-08	5926-08	5926-10-10	5926-10-10
7	Set Screw	2	5940-06	5940-06	5940-06	5940-06	5940-06	5940-06
8	Blind Cylinder Head	1	22939-01	22939-01	22945-01	22945-01	690173-01	690173-01
9	Cylinder Head Stud	6	STUD-FCHY-CYHD-3185M	STUD-FCHY-CYHD-3185M	5911-49	5911-49	34863-57-01-35	34863-57-01-35
10	Cylinder	1	20459-14	20459-14	20459-08	20459-08	689723-01	689723-01
11	Centering Pin	1	18596-01	18596-01	18596-01	18596-01	18598-01	18598-01
12	Set Screw	1	5940-01-01-04	5940-01-01-04	5940-01-01-04	5940-01-01-04	5940-01-01-04	5940-01-01-04
13	Piston Lock Nut	1	5953-05	5953-05	5953-05	5953-05	5953-06	5953-06
14	Piston	1	20582-01	20582-01	20946-01	20946-01	20828-01	20828-01
15	O-Ring	2	OR-214	OR-214	OR-214	OR-214	OR-218	OR-218
16	O-Ring	1	OR-333	OR-333	OR-333	OR-333	OR-336	OR-336
17	Gland	1	20454-02	20454-02	20943-02	20943-02	689722-02	689722-02
18	Stem Packing	2	686598-01	686598-01	686598-01	686598-01	686598-12	686598-12
19	Lower Cylinder Head	1	20583-1	20583-1	20938-01	20938-01	689721-62-0766	689721-62-0766
20	Relief Valve	1	5929-10	5929-10	5929-10	5929-10	5929-10	5929-10
21	Bonnet Nut	8	5926-25-10	5926-25-10	5926-24-10	5926-24-10	5926-23-10	5926-23-10
22	Bonnet	1	BONNET-FCM3185	BONNET-FCM3185	BONNET-FCM311610	BONNET-FCM311610	BONNET-FCM3116-15	BONNET-FCM3116-15
23	Grease Fitting	1	5929-55	5929-55	5929-55	5929-55	5929-55—16-AUTOCLAVE	5929-55-916-AUTOCLAVE
24	Valve Check	-	-	-	678627-01-99	678627-01-99	678627-01-99	678627-01-99
25	Bonnet Gasket	1	21793-27	21793-27	19141-10	19141-10	19141-13	19141-13
26	Stem	1	34272-02-99	34272-02-99	34272-04	34272-04	689720-02-99	689720-02-99
27a	Gate & Seat Assy (R. Trim)	1						
27b	Gate & Seat Assy (S. Trim)	1	21436-03-04		21436-03-04		21436-03-15	
28a	Gate (Regular Trim)	1	29399-01-R	29399-01-SS	29399-01-R	29399-01-SS		
28b	Gate (Super Trim)	1	29399-01-S	29399-01-SS-ST	29399-01-S	29399-01-SS-ST	610768-01	GATE3116-15FCHY-SS-ST
29	Retainer Plate	2	611404-03	611404-03	611404-03	611404-03	611404-15	611404-15
30	Seat Ring (Super Trim)	2	44783-06-S	44783-06-S	44783-06-S	44783-06-S	678353-01	678353-01
31	Seal Ring	2	610500-50	610500-50	610500-50	610500-50	610500-55	610500-55
32	Pin	1	21812-52	21812-52	21812-52	21812-52	21812-60	21812-60
33	Lower Stem	1	34271-03	34271-03	34271-03	34271-03	610929-04	610929-04
34	Bonnet Stud	8	5914-21-10	5914-21-10	5917-33-10	5917-33-10	-	-
35	Bonnet locating Pin	2	21814-05	21814-05	-	-	-	-
36	Body	1	BODY-FCHY3185	BODY-FCHY3185	BODY-FCHY311610	BODY-FCHY311610	BODY-FCHY3116-15	BODY-FCHY3116-15
37	Name Plate	1	19052	19052	19052	19052	19052-01	19052-01
38	Pipe Plug	1	5930-01 ½"	5930-01 ½"	5930-01 ½"	5930-01 ½"	-	-
39	Stem Protector	1	20953-01	20953-01	20953-01	20953-01	STEMPROTECTOR 311615CIWFFC	STEMPROTECTOR 311615CIWFFC
40	Body Bushing	2	694813-01	694813-01	630469-06	630469-06	630471-02	630471-02
41	Body Bushing Seal	2	610500-50	610500-50	610500-50	610500-50	610500-55	610500-55
42	Guide	2	694482-01	694482-01	694482-01	694482-01	44640-01	44640-01
44	Back-Up Ring	1	-		-	-	OR-222	OR-222

Replacement parts for Cameron⁺ Type 'F' & 'FC' Hydraulic Valve 4-1/16"

Item No	Description	Qty	5,000 PSI 'DD' Trim Regular (a) Super (b)	5,000 PSI 'EE' Trim SS Regular (a) SS Super (b)	10,000 PSI 'DD' Trim Regular (a) Super (b)	10,000 PSI 'EE' Trim SS Regular (a) SS Super (b)	15,000 PSI 'DD' Trim Regular (a) Super (b)	15,000 PSI 'EE' Trim SS Regular (a) SS Super (b)
			Part Number	Part Number	Part Number	Part Number	Part Number	Part Number
1	Handwheel	1	19937-01	19937-01	20774-02	20774-02	20774-02	20774-02
2	O-Ring	1	OR-222	OR-222	OR-222	OR-222	OR-325	OR-325
3	Adjusting Nut	1	22938-01	22938-01	22850-01	22850-01	44611-01	44611-01
4	O-Ring	3	OR-344	OR-344	OR-434	OR-434	OR-443	OR-443
5	Locking Screw	1	18597-04	18597-04	18597-04	18597-04	18597-07	18597-07
6	Cylinder Head Nut	6	5926-08	5926-08	5926-10	5926-10	5926-25-10	5926-25-10
7	Set Screw	2	5940-06	5940-06	5940-06	5940-06	5940-37	5940-37
8	Blind Cylinder Head	1	22939-01	22939-01	22410-01	22410-01	44614-01	44614-01
9	Cylinder Head Stud	6	STUD-FCHY-CYHD-41165M	STUD-FCHY-CYHD-41165M	5913-30	5913-30	38732-58-01-67	38732-58-01-67
10	Cylinder	1	20459-3	20459-3	20459-07	20459-07	689723-02	689723-02
11	Centering Pin	1	18596-01	18596-01	18598-01	18598-01	18598-01	18598-01
12	Set Screw	1	5940-01-01-04	5940-01-01-04	5940-01-01-04	5940-01-01-04	5940-01-01-04	5940-01-01-04
13	Piston Lock Nut	1	5953-05	5953-05	5953-06	5953-06	5953-07	5953-07
14	Piston	1	20582-01	20582-01	20828-01	20828-01	44612-01	44612-01
15	O-Ring	2	OR-214	OR-214	OR-218	OR-218	OR-325	OR-325
16	O-Ring	1	OR-333	OR-333	OR-337	OR-337	OR-337	OR-337
17	Gland	1	20454-02	20454-02	20827-02	20827-02	PACKINGGLAND FCHY4116-15	PACKINGGLAND FCHY4116-15
18	Stem Packing	2	686598-01	686598-01	686598-02	686598-02	686598-12	686598-12
19	Lower Cylinder Head	1	20583-1	20583-1	20553-01	20553-01	446178-01	446178-01
20	Relief Valve	1	5929-10	5929-10	5929-10	5929-10	5929-10	5929-10
21	Bonnet Nut	8	5926-23-10	5926-23-10	5926-27-10	5926-27-10	5926-28-10	5926-28-10
22	Bonnet	1	BONNET-FCM41165	BONNET-FCM41165	BONNET-FCM411610	BONNET-FCM411610	BONNET-FCM4116-15	BONNET-FCM4116-15
23	Grease Fitting	1	5929-55	5929-55	5929-55	5929-55	5929-55-916-AUTOCLAVE	5929-55-916-AUTOCLAVE
24	Valve Check	-	-	-	678627-01	678627-01	678627-01-99	678627-01-99
25	Bonnet Gasket	1	21794-03	21794-03	19141-11	19141-11	19141-15	19141-15
26	Stem	1	34272-03	34272-03	38638-01	38638-01	44613-02	44613-02
27a	Gate & Seat Assy (R. Trim)	1						
27b	Gate & Seat Assy (S. Trim)	1	21436-04-07		21436-04-05			
28a	Gate (Regular Trim)	1	679362-01-R		34273-01-R	34273-01-R-SS		
28b	Gate (Super Trim)	1	679632-01	679632-01-SS-ST	34273-01	34273-01-SS-HF	44618-01	GATEFCHY4116-15-SS-ST
29	Retainer Plate	2	611404-05	611404-05	611404-17	611404-17	682257-01	682257-01
30	Seat Ring (Super Trim)	2	610482-03-S	610482-03-S	610978-02-S	610978-02-S	611535-02	611535-02
31	Seal Ring	2	610500-47	610500-47	610500-47	610500-47	610500-58	610500-58
32	Pin	1	21812-52	21812-52	21810-80	21810-80	21610-98	21610-98
33	Lower Stem	1	34271-01	34271-01	28360-03	28360-03	44603-02-99	44603-02-99
34	Bonnet Stud	8	5915-67-10	5915-67-10	6306-22-10	6306-22-10	-	-
35	Bonnet locating Pin	2	21814-05	21814-05	-	-	-	-
36	Body	1	BODY-FCHY41165	BODY-FCHY41165	BODY-FCHY411610	BODY-FCHY411610	BODY-FCHY4116-15	BODY-FCHY4116-15
37	Name Plate	1	19052	19052	19052-01	19052-01	19052-01	19052-01
38	Pipe Plug	1	5930-01 1/2"	5930-01 1/2"	5930-01 1/2"	5930-01 1/2"	-	-
39	Stem Protector	1	20461-01	20461-01	20849-02	20849-02	44615-01	44615-01
40	Body Bushing	2	694815-01	694815-01	610774-02	610774-02	630706-02	630706-02
41	Body Bushing Seal	2	610500-47	610500-47	610500-47	610500-47	610500-58	610500-58
42	Guide	2	694816-01	694816-01	694406-01	694406-01	611045-01	611045-01
43	Back-Up Ring	4	-	-	-	-	BU-325	BU-325
44	Back-Up Ring	1	-	-	-	-	BU-429	BU-429
45	Back-Up Ring	1	-	-	-	-	BU-434	BU-434
46	Back-Up Ring	3	-	-	-	-	BU-443	BU-443

Cameron⁺ Type 'FL' Manual Valve



Parts List

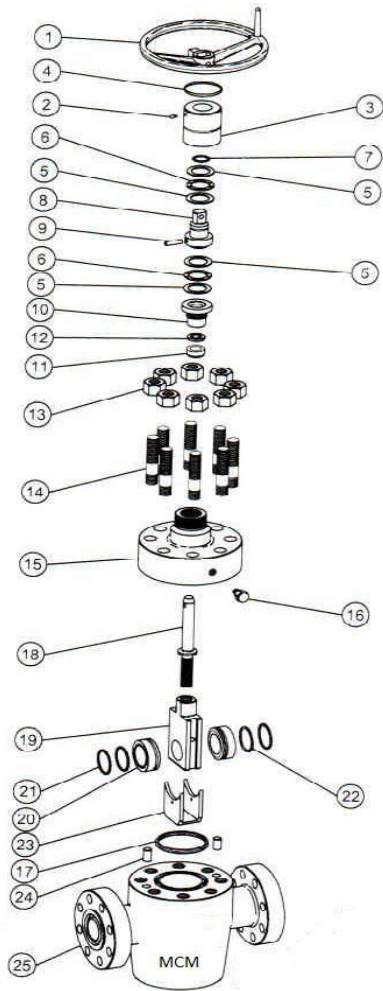
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|----|--------------------------|
| 1 | Hand Wheel Assembly |
| 2 | Grease Fitting |
| 3 | Bearing Cap |
| 4 | O-Ring |
| 5 | Bearing Race |
| 6 | Thrust Bearing |
| 7 | O-Ring |
| 8 | Stem Adapter |
| 9 | Stem Shear Pin |
| 10 | Packing Gland |
| 11 | Stem Packing |
| 12 | Nut |
| 13 | Stud |
| 14 | Bonnet |
| 15 | Grease Injection Fitting |
| 16 | Bonnet Seal Ring |
| 17 | Stem |
| 18 | Gate |
| 19 | Seat |
| 20 | Seal Ring |
| 21 | Retainer Plate |
| 22 | Dowel Pin |
| 23 | Body |

Replacement Parts for Cameron⁺ Type 'FL'

Item No.	Description	2-1/16" 5,000 PSI	2-1/16" 10,000 PSI	3-1/8" 5,000 PSI
		Part Number	Part Number	Part Number
4	O-Ring	OR-340	OR-340	OR-340
5	Bearing Race	TRD2840	TRD2840	TRD2840
6	Bearing	NTA2840	NTA2840	NTA2840
7	O-Ring	OR-222	OR-222	OR-222
11	Stem Packing	686598-01	686598-01	686598-01
15	Grease Fitting	5929-55	5929-55	5929-55
16	Bonnet Gasket	21793-11	19141-07	21793-27
17	Stem	29381-01	29381-01	29381-03
18	Gate	23042-02	23042-9-02	23247-02
19	Seat Ring	630248-05	630248-05	630250-5
20	Seat Ring Seal	610500-92	610500-92	610500-71
21	Retainer Plate	630252-01	630252-01	630254-01

Item No.	Description	3-1/16" 10,000 PSI	4-1/16" 5,000 PSI	7-1/16" 5,000 PSI (6-3/8 Bore)
		Part Number	Part Number	Part Number
4	O-Ring	OR-340	OR-340	OR-343
5	Bearing Race	TRD2840	TRD2840	TRD3244
6	Bearing	NTA2840	NTA2840	NTA3244
7	O-Ring	OR-222	OR-222	OR-224
11	Stem Packing	686598-01	686598-01	686598-02
15	Grease Fitting	5929-55	5929-55	5929-55
16	Bonnet Gasket	19141-10	21794-03	140171-06-02-04
17	Stem	29381-03	29381-04-99	654057-03
18	Gate	23247-02	23248-01	654058-02
19	Seat Ring	653250-5	630251-5	654056-0
20	Seat Ring Seal	610500-71	610500-67	19719-93
21	Retainer Plate	630254-01	630255-01	654061-01

Cameron⁺ Type 'FLS' Manual Valve



Parts List

- | | |
|----|-------------------------|
| 1 | Hand Wheel |
| 2 | Bearing Cap Grease Fttg |
| 3 | Bearing Cap |
| 4 | Bearing Cap O-ring |
| 5 | Bearing Race |
| 6 | Thrust Bearing |
| 7 | O-ring Stem Adapter |
| 8 | Stem Adapter |
| 9 | Pin Stem Adapter |
| 10 | Packing Gland |
| 11 | Stem Packing |
| 12 | Seal Back Up |
| 13 | Stud |
| 14 | Nut |
| 15 | Bonnet |
| 16 | Body Lube Fitting |
| 17 | Bonnet Gasket |
| 18 | Stem |
| 19 | Gate |
| 20 | Seat Ring |
| 21 | OD Seal Ring |
| 22 | ID Seal Ring |
| 23 | Retainer Plate |
| 24 | Pin |
| 25 | Body |

MCM OIL TOOLS FLS STYLE GATE VALVE SPARE PARTS

Replacement Parts for Cameron⁺ Type 'FLS' **Manual** Valve 2-1/16"

ItemNo.	Description	Qty	5,000 PSI 'DD' Super Trim	5,000 PSI 'EE' SS Super Trim	10,000 PSI 'DD' Super Trim	10,000 PSI 'EE' SS Super Trim	15,000 PSI 'DD' Super Trim	15,000 PSI 'EE' SS Super Trim
			Part Number	Part Number	Part Number	Part Number	Part Number	Part Number
1	Handwheel	1	19937-01	19937-01	19937-01	19937-01	19937-03	19937-03
2	Bearing CapGrease Fttg	2	5929-05	5929-05	5929-05	5929-05	5929-05	5929-05
3	Bearing Cap	1	19106-01	19106-01	19106-01	19106-01	19106-01	19106-01
4	O-Ring	1	OR-340	OR-340	OR-340	OR-340	OR-340	OR-340
5	Bearing Race	4	TRD2840	TRD2840	TRD2840	TRD2840	TRD2840	TRD2840
6	Thrust Bearing	2	NTA284	NTA284	NTA284	NTA284	NTA284	NTA284
7	O-Ring (Stem-Adapter)	1	OR-222	OR 222	OR-222	OR-222	OR-222	OR-222
8	Stem Adapter	1	20871-01	20871-01	20871-01	20871-01	20871-01	20871-01
9	Stem Pin	1	21812-14	21812-14	21812-14	21812-14	21812-14	21812-14
10	Packing Gland	1	20874-01	20874-01	20874-01	20874-01	20874-01	20874-01
11	Stem Packing	1	20129912-01-01	20129912-01-01	20129912-01-01	20129912-01-01	20129912-01-01	2012992-01-01-1"THICK
12	BackUp Ring	1	—	—	—	—	691889-04	2013133-01
13	Nut	8	5926-09-10	5926-09-10	5926-25-10	5926-25-10	5926-23-10	5926-23-10-BSL1
14	Stud	8	5912-67-10	5912-67-10	5914-18-10	5914-18-10	5915-67-10	5915-67-10-BSL1
15	Bonnet	1	BONNET-FLSM21165		BONNET-FCM211610		BONNET-FLSM2116-15	
16	Body Grease Fitting	1	5929-55	5929-55	5929-55	5929-55	712806	712806
17	Bonnet Gasket	1	21793-11		19141-07	19141-07	19141-45	19141-45
18	Stem	1	29381-01	29381-01	29381-01	29381-01	29381-01	29381-01
19	Gate	1	23042-02	19798-03-ST	23042-02	19798-03-ST	140676-01-71-02-S	GATEFLSM2116-15-SSHF
20	Seat Ring (Super Trim)	2	140137-01-71-03-S	140137-01-71-03-S	140137-01-71-03-S	140137-01-71-03-S	140675-01-71-02	140675-01-71-02
21	OD Seal Ring	2	140146-03-01-03	140146-03-01-03	140146-03-01-03	140146-03-01-03	140146-06-01-03	140146-06-01-03
22	ID Seal Ring	2	140398-02-01-03	140398-02-01-03	140398-02-01-03	140398-02-01-03	140398-02-01-03	140398-02-01-03
23	Retainer Plate	1	630252-01	630252-01	630252-01	630252-01	630252-01	2012289-01
24	Pin	2	21813-06	21813-06	21813-06	21813-06	21813-06	-
25	Body	1	BODY-FLSM21165	BODY-FLSM21165	BODY-FLSM211610	BODY-FLSM211610	BODY-FLSM2116-15	BODY-FLSM2116-15

Replacement Parts for Cameron⁺ Type 'FLS' Manual Valve 3-1/8" & 3-1/16"

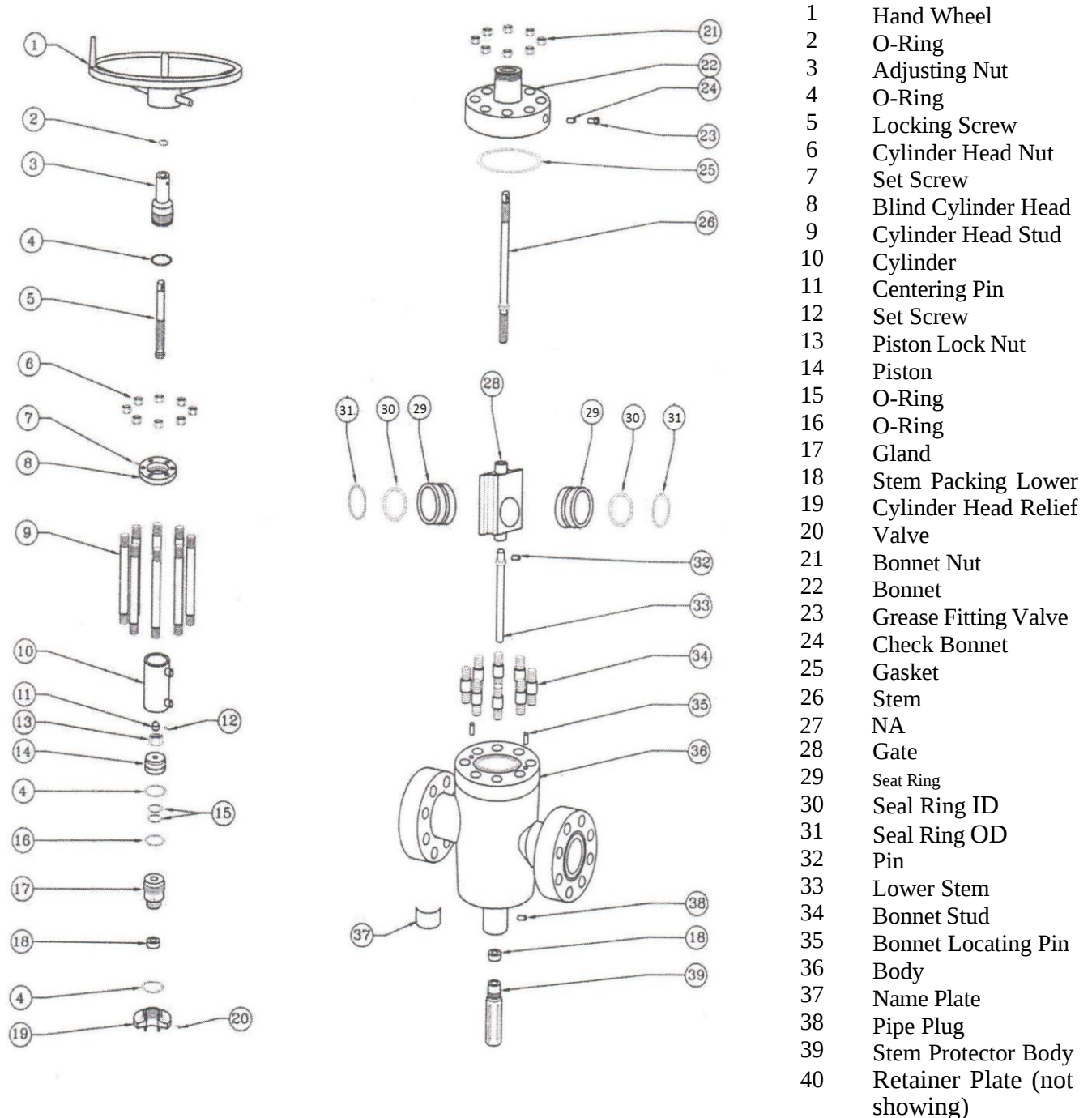
Item No.	Description	Qty	5,000 PSI 'DD' Super Trim	5,000 PSI 'EE' SS Super Trim	10,000 PSI 'DD' Super Trim	10,000 PSI 'EE' SS Super Trim	15,000 PSI 'DD' Super Trim	15,000 PSI 'EE' SS Super Trim
			Part Number	Part Number	Part Number	Part Number	Part Number	Part Number
1	Handwheel	1	19937-03	19937-03	20774-02	20774-02	20774-02	20774-02
2	Grease Fitting (Bearing Cap)	2	5929-05	5929-05	5929-05	5929-05	5929-05	5929-05
3	Bearing Cap	1	19106-01	19106-01	19312-01	19312-01	19312-01	19312-01
4	O-Ring	1	OR-340	OR-340	OR-340	OR-340	OR-354	OR-354
5	Bearing Race	4	TRD2840	TRD2840	TRD3244	TRD3244	TRD3244	TRD3244
6	Thrust Bearing	2	NTA2840	NTA2840	NTA3244	TRD3244	NTA3244	NTA3244
7	O-Ring (Stem-Adapter)	1	OR-222	OR-222	OR-224	OR-224	OR-224	OR-224
8	Stem Adapter	1	20871-01	20871-01	20873-01	20873-01	20873-01	20873-01
9	Stem Pin	1	21812-14	21812-14	21812-15	21812-15	21812-15	21812-15
10	Packing Gland	1	20874-01	20874-01	690169	690169	690169	690169
11	Stem Packing	1	2012992-01-01	2012992-01-01	2012992-03-01	2012992-03-01	2012992-03-01	2012992-03-01
12	Back Up Ring	1	—	—	—	—	2013133-03	2013133-03
13	Nut	8	5926-25-10	5926-25-10	5926-24-10	5926-24-10	5926-27-10	5926-27-10
14	Stud	8	5914-21-10	5914-21-10	5917-33-10	5917-33-10	6306-22-10	6306-22-10
15	Bonnet	1	BONNET-FCM3185		BONNET-FLSM311610		BONNET-FLSM3116-15	
16	Grease Fitting	1	5929-55	5929-55	5929-55	5929-55	712806	712806
17	Bonnet Gasket	1	21793-27	21793-27	19141-10	19141-10	140170-07-01-04	140170-07-01-04
18	Stem	1	140150-30-01-01	140150-30-01-01	140151-10-70-03	140151-10-70-03	STEMFLSM-3116-15	
19	Gate	1	140192-01-71-03	140192-01-71-03	140259-01-71-03-S	140259-01-71-03-SS-ST	140342-01-71-03	140342-01-71-03
20	Seat	1	140254-01-72-03-S	140254-01-72-03-S	140254-01-72-03-S	140254-01-72-03-S	SEATFLS3116-15ST	
21	OD SEAL	2	140399-04-01-03	140399-04-01-03	140399-04-01-03	140399-04-01-03	140399-07-01-03	140399-07-01-03
22	ID SEAL	2	140398-04-01-03	140398-04-01-03	140398-04-01-03	140398-04-01-03	140398-04-01-03	140398-04-01-03
23	Retainer Plate	1	631999-01	631999-01	631999-01	631999-01	630859-01	630859-01
24	Pin	2	21813-06	21813-06			-----	-----
25	Body	1	BODY-FLSM3185		BODY-FLSM311610		BODY-FLSM3116-15	

Replacement parts for Cameron⁺ Type 'FLS' Manual Valve 4-1/16"

Item No.	Description	QTY	5,000 PSI 'DD' Super Trim	5,000 PSI 'EE' SS SUPER TRIM	10,000 PSI 'DD' Super Trim	10,000 PSI 'EE' SS SUPERTRIM
			Part Number	Part Number	Part Number	Part Number
1	Handwheel	1	19337-03	19337-03	20774-02	20774-02
2	Grease Fitting (Bearing Cap)	2	5929-05	5929-05	5929-05	5929-05
3	Bearing Cap	1	19106-01	19106-01	19312-01	19312-01
4	Bearing Cap Oring	1	OR-340	OR-340	OR-340	OR-340
5	Bearing Race	4	TRD2840	TRD2840	TRD3244	TRD3244
6	Thrust Bearing	2	NTA2840	NTA2840	NTA3244	NTA3244
7	O-Ring (Stem- Adapter)	1	OR-222	OR-222	OR-224	OR-224
8	Stem Adapter	1	20871-01	20871-01	20873-01	20873-01
9	Stem Pin	1	21812-14	21812-14	21812-15	21812-15
10	Packing Gland	1	20874-01	20874-01	690169	690169
11	Stem Packing	1	2012992-01-01	2012992-01-01	2012992-03-01	2012992-03-01
12	Seal Back Up	1			2013133-03	2013133-03
13	Stud	8	5915-67-10	5915-67-10	6306-22-10	6306-22-10
14	Nut	8	5926-23-10	5926-23-10	5926-27-10	5926-27-10
15	Bonnet	1	BONNET-FCM41165		BONNET-FLSM411610	
16	Grease Fitting	1	5929-25	5929-25	5929-55	5929-55
17	Bonnet Gasket	1	21794-03	21794-03	19141-11	19141-11
18	Stem	1	29381-04-99	29381-04-99	38228-01	38228-01
19	Gate	1	GATEFLSM41165-SSHf	GATEFLSM41165-SSHf	140131-01-71-03	140131-01-71-03-SS-ST
20	Seat	2	140136-01-72-S	140136-01-72-S	140230-01-71-02	140230-01-71-02
21	OD Seal Ring	2	140146-01-01-0	140146-01-01-0	140146-02-01-03	140146-02-01-03
22	ID Seal Ring	2	140147-01-01-0	140147-01-01-0	140147-01-01-03	140147-01-01-03
23	Retainer Plate	1	630255-01	630255-01	630255-01	630255-01
24	Pin	1	21813-06	21813-06	NA	NA
25	Body	1	BODY-FLSM41165		BODY-FLSM411610	

Cameron⁺ Style 'FLS' Hydraulic Valve

Parts List



Replacement parts for Cameron⁺ Type 'FLS' Hydraulic Valve 2-1/16"

Item No	Description	Qty	5,000 PSI 'DD' Trim Regular (a) Super (b)	5,000 PSI 'EE' Trim SS Regular (a) SS Super (b)	10,000 PSI 'DD' Trim Regular (a) Super (b)	10,000 PSI 'EE' Trim SS Regular (a) SS Super (b)	15,000 PSI 'DD' Trim Regular (a) Super (b)	15,000 PSI 'EE' Trim SS Regular (a) SS Super (b)
			Part Number	Part Number	Part Number	Part Number	Part Number	Part Number
1	Handwheel	1	19937-01	19937-01	19937-03	19937-03	19937-03	19937-03
2	O-Ring	1	OR-222	OR-222	OR-222	OR-222	OR-222	OR-222
3	Adjusting Nut	1	22936-01	22936-01	22936-01	22936-01	22936-01	22936-01
4	O-Ring	3	OR-344	OR-344	OR-344	OR-344	OR-344	OR-344
5	Locking Screw	1	18597-01	18597-01	18597-01	18597-01	18597-01	18597-01
6	Cylinder Head Nut	6	5926-08	5926-08	5926-08	5926-08	5926-08	5926-08
7	Set Screw	2	5940-06	5940-06	5940-06	5940-06	5940-06	5940-06
8	Blind Cylinder Head	1	22939-01	22939-01	22939-01	22939-01	22939-01	22939-01
9	Cylinder Head Stud	6	5911-48	5911-48	5911-48	5911-48	5911-48	5911-48
10	Cylinder	1	20459-04	20459-04	20459-04	20459-04	20459-04	20459-04
11	Centering Pin	1	18596-01	18596-01	18596-01	18596-01	18596-01	18596-01
12	Set Screw	1	5940-01-01-04	5940-01-01-04	5940-01-01-04	5940-01-01-04	5940-01-01-04	5940-01-01-04
13	Piston Lock Nut	1	5953-05	5953-05	5953-05	5953-05	5953-05	5953-05
14	Piston	1	20582-01	20582-01	20582-01	20582-01	20582-01	20582-01
15	O-Ring	2	OR-214	OR-214	OR-214	OR-214	OR-214	OR-214
16	O-Ring	1	OR-333	OR-333	OR-333	OR-333	OR-333	OR-333
17	Gland	1	20454-02	20454-02	20454-02	20454-02	20454-02	20454-02
18	Stem Packing	2	2012992-01-01	2012992-01-01	2012992-01-01	2012992-01-01	2012992-01-01	2012992-01-01
19	Lower Cylinder Head	1	20583-1	20583-1	20583-1	20583-1	20583-1	20583-1
20	Relief Valve	1	5929-10	5929-10	5929-10	5929-10	5929-10	5929-10
21	Bonnet Nut	8	5926-09-10	5926-09-10	5926-25-10	5926-25-10	5926-23-10	5926-23-10
22	Bonnet	1	BONNET-FLSM21165		BONNET-FLSM211610		BONNET-FLSM2116-15	
23	Grease Fitting	1	5929-55	5929-55	5929-55	5929-55	5929-55-916-AUTOCLAVE	5929-55-916-AUTOCLAVE
24	Valve Check	-	-	-	678627-01-99	678627-01-99	678627-01-99	678627-01-99
25	Bonnet Gasket	1	21793-11	21793-11	19141-07	19141-07	19141-07	19141-07
26	Stem	1	34272-01	34272-01	34272-01	34272-01	34272-01	34272-01
27		1	--	--	--	--	--	--
28a	Gate (Regular Trim)	1	29786-01-R	29786-01-SS	29786-01-R	29786-01-SS	29786-01-R	29786-01-SS
28b	Gate (Super Trim)	1	29786-01-S	29786-01-SS-ST	29786-01-S	29786-01-SS-ST	29786-01-S	29786-01-SS-ST
29	Seat Ring	2	140137-01-71-03-S	140137-01-71-03-S	140137-01-71-03-S	140137-01-71-03-S	140675-01-71-02-S	140675-01-71-02-S
30	Seal Ring ID	2	140398-02-01-03	140398-02-01-03	140398-02-01-03	140398-02-01-03	140398-02-01-03	140398-02-01-03
31	Seal Ring OD	2	140146-03-01-03	140146-03-01-03	140146-03-01-03	140146-03-01-03	140146-06-01-03	140146-06-01-03
32	Pin	1	21812-52	21812-52	21812-52	21812-52	21812-52	21812-52
33	Lower Stem	1	34271-02	34271-02	34271-02	34271-02	34271-02	34271-02
34	Bonnet Stud	8	5912-67-10	5912-67-10	5914-18-10	5914-18-10	5915-67-10	5915-67-10
35	Bonnet locating Pin	2	21813-06	21813-06	-	-	-	-
36	Body	1	BODY-FLSHY21165		BODY-FLSHY211610		BODY-FLSHY2116-15	
37	Name Plate	1	19052	19052	19052	19052	19052	19052
38	Pipe Plug	1	5930-01 1/2"	5930-01 1/2"	5930-01 1/2"	5930-01 1/2"	5930-01 1/2"	5930-01 1/2"
39	Stem Protector	1	20460-02	20460-02	20460-02	20460-02	20460-02	20460-02
40	Retainer Plate	2	630691-01	630691-01	630691-01	630691-01	630691-01	630691-01

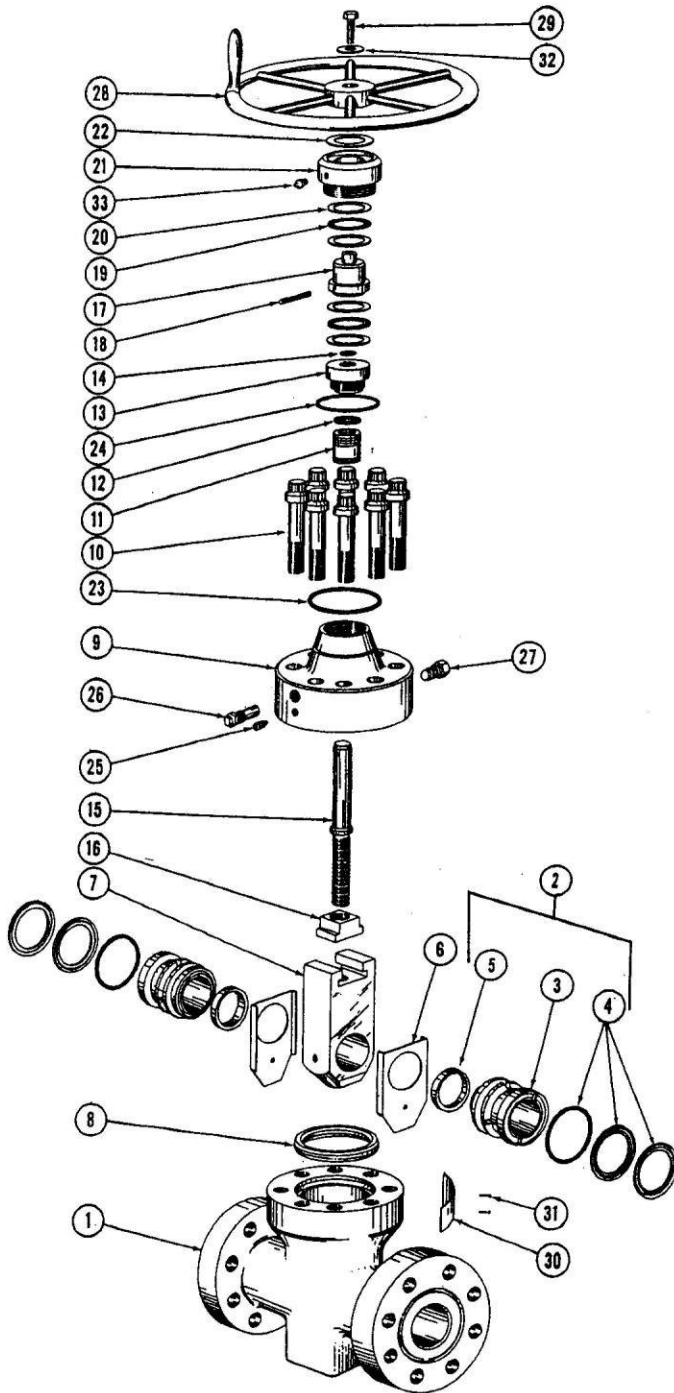
Replacement parts for Cameron⁺ Type 'FLS' Hydraulic Valve 3-1/8", 3-1/16"

Item No	Description	Qty	5,000 PSI 'DD' Trim Super	5,000 PSI 'EE' Trim SS Super	10,000 PSI 'DD' Trim Super	10,000 PSI 'EE' Trim SS Super	15,000 PSI 'EE' Trim SS SUPER
			Part Number	Part Number	Part Number	Part Number	Part Number
1	Handwheel	1	20774-02	20774-02	20774-02	20774-02	20774-02
2	O-Ring	1	OR-222	OR-222	OR-222	OR-222	OR-222
3	Adjusting Nut	1	22948-01-5M	22948-01-5M	22948-01-10M	22948-01-10M	22850-01
4	O-Ring	3	OR-345	OR-345	OR-348	OR-348	OR-434
5	Locking Screw	1	18597-03	18597-03	18597-03	18597-03	18597-04
6	Cylinder Head Nut	6	5926-08	5926-08	5926-08	5926-08	5926-10
7	Set Screw	2	5940-06	5940-06	5940-06	5940-06	5940-06
8	Blind Cylinder Head	1	22939-01	22939-01	22945-01	22945-01	22410-01
9	Cylinder Head Stud	6	STUD-FCHYD-CYHD3185M		5911-49	5911-49	5913-30
10	Cylinder	1	20459-14	20459-14	20459-08	20459-08	20459-07
11	Centering Pin	1	18596-01	18596-01	18596-01	18596-01	18598-01
12	Set Screw	1	5940-01-01-04	5940-01-01-04	5940-01-01-04	5940-01-01-04	5940-01-01-04
13	Piston Lock Nut	1	5953-05	5953-05	5953-05	5953-05	5953-06
14	Piston	1	20582-01	20582-01	20946-01	20946-01	20828-01
15	O-Ring	2	OR-214	OR-214	OR-214	OR-214	OR-218
16	O-Ring	1	OR-333	OR-333	OR-333	OR-333	OR-337
17	Gland	1	20454-02	20454-02	20943-02	20943-02	20827-02
18	Stem Packing	2	2012992-01-01	2012992-01-01	2012992-01-01	2012992-01-01	2012992-03-01
19	Lower Cylinder Head	1	20583-1	20583-1	20938-01	20938-01	20553-01
20	Relief Valve	1	5929-10	5929-10	5929-10	5929-10	5929-10
21	Bonnet Nut	8	5926-25-10	5926-25-10	5926-24-10	5926-24-10	6306-22-10
22	Bonnet	1	BONNET-FLSM3185		BONNET-FLSM311610		BONNET-FLSM3116-15
23	Grease Fitting	1	5929-55	5929-55	5929-55	5929-55	712806
24	Valve Check	-	-	-	678627-01-99	678627-01-99	--
25	Bonnet Gasket	1	21793-27	21793-27	19141-10	19141-10	19141-13
26	Stem	1	34272-02-99	34272-02-99	34272-04	34272-04	
27	N/A	--	--	--	--	--	
28	Gate	1	2012303-71-03-01	GATEFLSHY 31165/10-SS-ST	2012303-71-03-01	GATEFLSHY 31165/10-SS-ST	GATEFLSHY3116-15-SS-ST
29	Seat Ring	2	140254-01-72-03-S	140254-01-72-03-S	140254-01-72-03-S	140254-01-72-03-S	SEATFLS3116-15ST
30	Seal Ring ID	2	140398-04-01-03	140398-04-01-03	140398-04-01-03	140398-04-01-03	140399-07-01-03
31	Seal Ring OD	2	140399-04-01-03	140399-04-01-03	140399-04-01-03	140399-04-01-03	140398-04-01-03
32	Pin	1	21812-52	21812-52	21812-52	21812-52	21810-80
33	Lower Stem	1	34271-03	34271-03	34271-03	34271-03	28360-03
34	Bonnet Stud	8	5914-21-10	5914-21-10	5917-33-10	5917-33-10	6306-22-10
35	Bonnet locating Pin	2	21814-05	21814-05	-	-	-
36	Body	1	BODY-FLSHY3185		BODY-FLSHY311610		BODY-FLSHY3116-15
37	Name Plate	1	--	--	--	--	--
38	Pipe Plug	1	5930-01 ½"	5930-01 ½"	5930-01 ½"	5930-01 ½"	5930-01 ½"
39	Stem Protector	1	20953-01	20953-01	20953-01	20953-01	20849-02
40	Retainer Plate	1	2012298-01	2012298-01	2012298-01	2012298-01	RETAINERPLATE-FLSHY3116-15

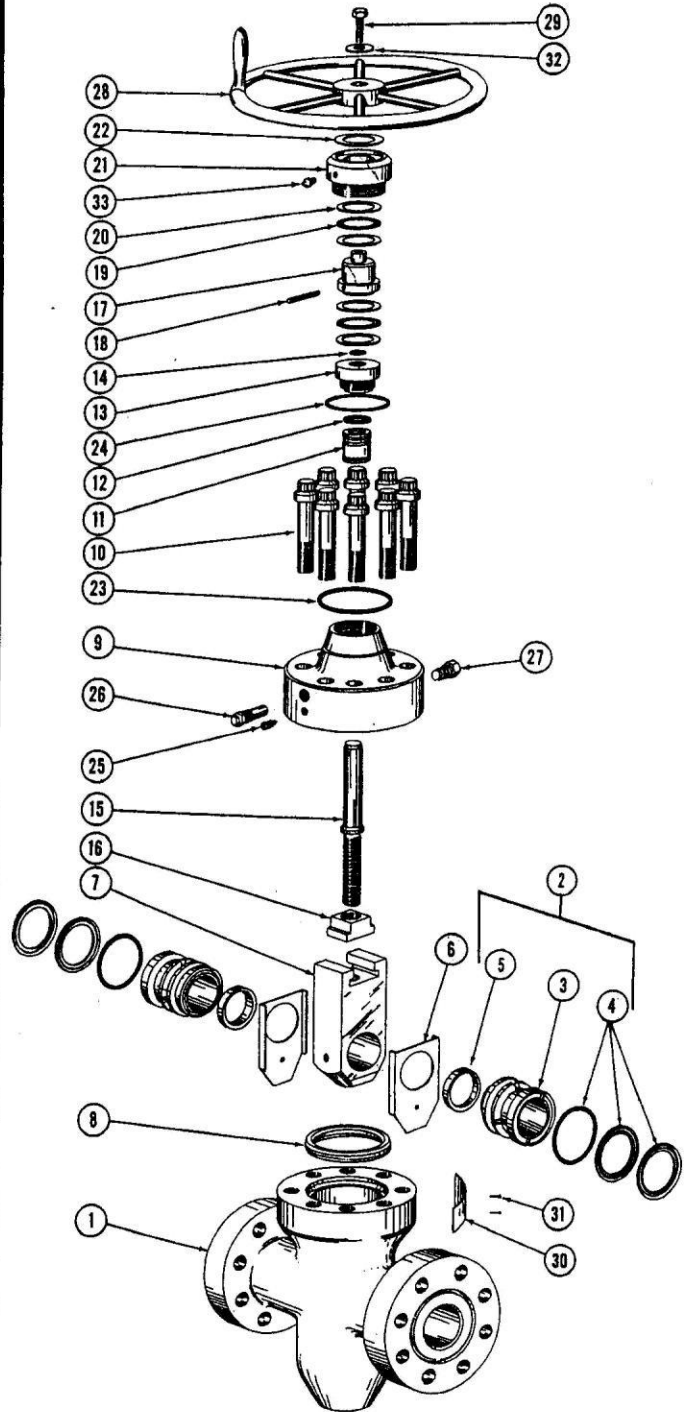
Replacement parts for Cameron⁺ Type 'FLS' 4-1/16"

Item No	Description	Qty	5,000 PSI 'DD' Trim	5,000 PSI 'EE' Trim	10,000 PSI 'DD' Trim	10,000 PSI 'EE' Trim
			Super Part Number	SS Super Part Number	Super Part Number	SS Super Part Number
1	Handwheel	1	19937-01	19937-01	20774-02	20774-02
2	O-Ring	1	OR-222	OR-222	OR-222	OR-222
3	Adjusting Nut	1	22938-01	22938-01	22850-01	22850-01
4	O-Ring	3	OR-344	OR-344	OR-434	OR-434
5	Locking Screw	1	18597-04	18597-04	18597-04	18597-04
6	Cylinder Head Nut	6	5926-08	5926-08	5926-10	5926-10
7	Set Screw	2	5940-06	5940-06	5940-06	5940-06
8	Blind Cylinder Head	1	22939-01	22939-01	22410-01	22410-01
9	Cylinder Head Stud	6	STUD-FCHY-CYD-41165M		5913-30	5913-30
10	Cylinder	1	20459-3	20459-3	20459-07	20459-07
11	Centering Pin	1	18596-01	18596-01	18598-01	18598-01
12	Set Screw	1	5940-01-01-04	5940-01-01-04	5940-01-01-04	5940-01-01-04
13	Piston Lock Nut	1	5953-05	5953-05	5953-06	5953-06
14	Piston	1	20582-01	20582-01	20828-01	20828-01
15	O-Ring	2	OR-214	OR-214	OR-218	OR-218
16	O-Ring	1	OR-333	OR-333	OR-337	OR-337
17	Gland	1	20454-02	20454-02	20827-02	20827-02
18	Stem Packing	2	686598-01	686598-01	2012992-03-01	2012992-03-01
19	Lower Cylinder Head	1	20583-1	20583-1	20553-01	20553-01
20	Relief Valve	1	5929-10	5929-10	5929-10	5929-10
21	Bonnet Nut	8	5926-23-10	5926-23-10	5926-27-10	5926-27-10
22	Bonnet	1	BONNET- FLSM41165		BONNET- FLSM411610	
23	Grease Fitting	1	5929-55	5929-55	5929-55	5929-55
24	Valve Check	-	-	-	678627-01	678627-01
25	Bonnet Gasket	1	21794-03	21794-03	19141-11	19141-11
26	Stem	1	34272-03	34272-03	38638-01	38638-01
27	NA	1				
28	Gate (Super Trim)	1	GATEFLSHY41165-SS-ST		GATEFLSHY411610-ST	
29	Seat Ring (Super Trim)	2	140254-01-72-03-S	140254-01-72-03-S	140230-01-72-02-S	140230-01-72-02-S
30	Seal Ring ID	2	140147-01-01-03	140147-01-01-03	140147-01-01-03	140147-01-01-03
31	Seal Ring OD	2	140146-023-01-03	140146-023-01-03	140146-02-01-03	140146-023-01-03
32	Pin	1	21812-52	21812-52	21810-80	21810-80
33	Lower Stem	1	34271-01	34271-01	28360-03	28360-03
34	Bonnet Stud	8	5915-67-10	5915-67-10	6306-22-10	6306-22-10
35	Bonnet locating Pin	2	21814-05	21814-05	-	-
36	Body	1	BODY-FLSHY41165		BODY-FLSHY411610	
37	Name Plate	1	19052	19052	19052-01	19052-01
38	Pipe Plug	1	5930-01 1/2"	5930-01 1/2"	5930-01 1/2"	5930-01 1/2"
39	Stem Protector	1	20461-01	20461-01	20849-02	20849-02
40	Retainer Plate	2	631591-01	631591-01	631591-01	631591-01

TYPE B Gate Valve Parts 5,000 & 10,000 Handwheel Operated



5,000 psi Type B Valve



10,000 psi Type B Valve

TYPE B Gate Valve Parts 5,000 & 10,000 Handwheel Operated

Service	Item Number	Description	Qty Req	No. Spare Parts Rec.	Part Number					
		Working Pressure (psi)			10,000			5,000		
		Bore (Inches)			4-1/16"	3-1/16"	2-1/16"	4-1/16"	3-1/8"	2-1/16"
Normal Temperature and Standard Trim		Assy #'s Standard Ring Grooves Stainless Steel Ring Grooves			719042	719041	719039	719036	719035	719281
					719283	719254		719250	719204	.....
	1	Body *	1		.....	.....	.....	.....	.....	.....
	2	Seat Assembly*	2	2	717921	717919	717917	717915	717913	717911
	3	Seat *	2	2	717872	717871	717870	717897	717907	717888
	4	O-Ring (Spring)	2	2	030928	030611	030601	030847	030608	030599
	5	Elastomeric II Face Seal	2	2	718187	718186	718185	718187	718186	718185
	6	Grease Plate	2	2	717174	717128	717109	717113	717909	717894
	7	Gate*	1	1	717138	717139	717135	717137	717905	717886
	8	Bonnet Gasket*	1	1	050388	050387	050383	050388	050385	050382
	9	Bonnet*	1		717118	717091	717122	717092	717123	717885
	10	Bonnet Bolts*†	8		060435	060435	060433	060434	060433	060430
	11	Packing Assembly	1	1	717075	717075	717078	717075	717078	717078
	12	Modular Bearing	1	1	062229	062229	062228	062229	062228	062228
	13	Packing Gland	1		717055	717055	717083	717055	717083	717083
	14	Gland O-Ring	1	1	030591	030591	030587	030591	030587	030587
	15	Stem	1	1	717060	717125	717140	717155	717141	717890
	16	Gate Bushing*	1	1	717378	717378	717383	717378	717383	717893
	17	Stem Adapter	1		717059	717059	717079	717059	717079	717079
	18	Dowel Pin	1		060921	060921	050071	060921	050071	050071
	19	Bearing	2	2	060810	060810	060808	060810	060808	060808
	20	Bearing Race	4	4	060811	060811	060809	060811	060809	060809
	21	Bearing Housing	1		717058	717058	717082	717058	717082	717082
	22	Grease Seal	1		060603	060603	060603	060603	060603	060603
	23	O-Ring*	1		030190	030190	030609	030190	030614	030609
	24	O-Ring	1		030624	030624	030609	030624	030609	030609
	25	Back Seat Test Screw	1		717379	717379	717379	717379	717379	717379
	26	Plastic Injection Screw	1		717031	717031	717031	717031	717031	717031
	27	Grease Fitting	1		060876	060876	060876	060876	060876	060876
	28	Handwheel	1		717736	717735	717735	717735	717734	717733
	29	Handwheel Bolt	1		010249	010249	010249	010249	010249	010249
	30	Name Plate	1		060902	060902	060902	060902	060902	060902
	31	Drive Screws	4		010568	010568	010568	010568	010568	010568
	32	Handwheel Washer	1		717115	717115	717115	717115	717115	717115
	33	Alemite Fitting	1		060882	060882	060882	060882	060882	060882
	34	Pipe Plug 1/2" NPT	1		066326	066326	066326	066326	066326	066326
	35	Grease			803031	803031	803031	803031	803031	803031
Normal Temperature and Internal H2S Trim		Assy #'s Standard Ring Grooves Stainless Steel Ring Grooves			719168	719167	719165	719128	719129	719282
					719227	719235	719236	719220	719274	.....
	1	Body **	1		.....	.....	.....	.....	.....	.....
	2	Seat Assembly	2	2	717922	717920	717918	717916	717914	717912
	3	Seat	2	2	717875	717874	717873	717898	717908	717889
	4	O-Ring (Spring)	2	2	030928	030611	030601	030847	030608	030599
	5	Elastomeric II Face Seal	2	2	718187	718186	718185	718187	718186	718185
	7	Gate	1	1	717466	717465	717463	717377	717906	717887
	8	Bonnet Gasket	1	1	050388	050387	050383	050388	050385	050382
	9	Bonnet	1		717118	717091	717122	717092	717123	717885
	15	Stem	1	1	717496	717376	717494	717376	717382	717891
	16	Gate Bushing	1	1	717378	717378	717383	717378	717383	717893
Arctic Temperature and Standard Trim		Assembly Numbers			719185	719184	719182	719179	719178	719176
	1	Body††	1		.....	.....	.....	.....	.....	.....
	9	Bonnet	1		717488	717487	717486	717483	717482	717480
	10	Bonnet Bolts	8		060452	060452	060450	060451	060450	060447
	15	Stem	1	1	717060	717125	717140	717155	717141	717490
Arctic Temperature and Internal H2S Trim	16	Gate Bushing	1	1	717378	717154	717153	717154	717363	718015
		Assy #'s Standard Ring Grooves Stainless Steel Ring Grooves			719264	719271	719270	719265	719273	719266
					719245	719258	719257		719260	.....
	1	Body††	1		.....	.....	.....	.....	.....	.....
	2	Seat Assembly	2	2	717922	717920	717918	717916	717914	717912
	7	Gate	1	1	717466	717465	717463	717377	717906	717887
	8	Bonnet Gasket	1	1	050388	050612	050608	050388	050385	717434
	9	Bonnet	1		717118	717849	717850	717062	717482	717094
	10	Bonnet Bolts †	8		060435	060452	060450	060434	060450	060431
	15	Stem	1	1	717060	717376	717494	717376	717382	717490
	16	Gate Bushing	1	1	717378	717378	717383	717378	717383	718015
	23	O-Ring	1		030190	030190	030609	.....	.....	.....

* Parts change for Arctic service and/or H2S service. **

* Use 12 bonnet bolts for 4 1/16" 10,000 psi valve. ††

Body uses standard trim part for this service.

Do not use normal temperature body for Arctic service.

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Juan Carlos Mendoza | Latam Area Manager

Ph: + 593-2-452-4545

Mobil: + 593-99-807-9145 | juancarlos.m@jcsupplyec.com

Santiago Ayala | Business Development Manager Ecuador

Ph: + 593-2-452-4545

Mobil: + 593-93-991-3925 | santiago.a@jcsupplyec.com

www.jcsupplyec.com