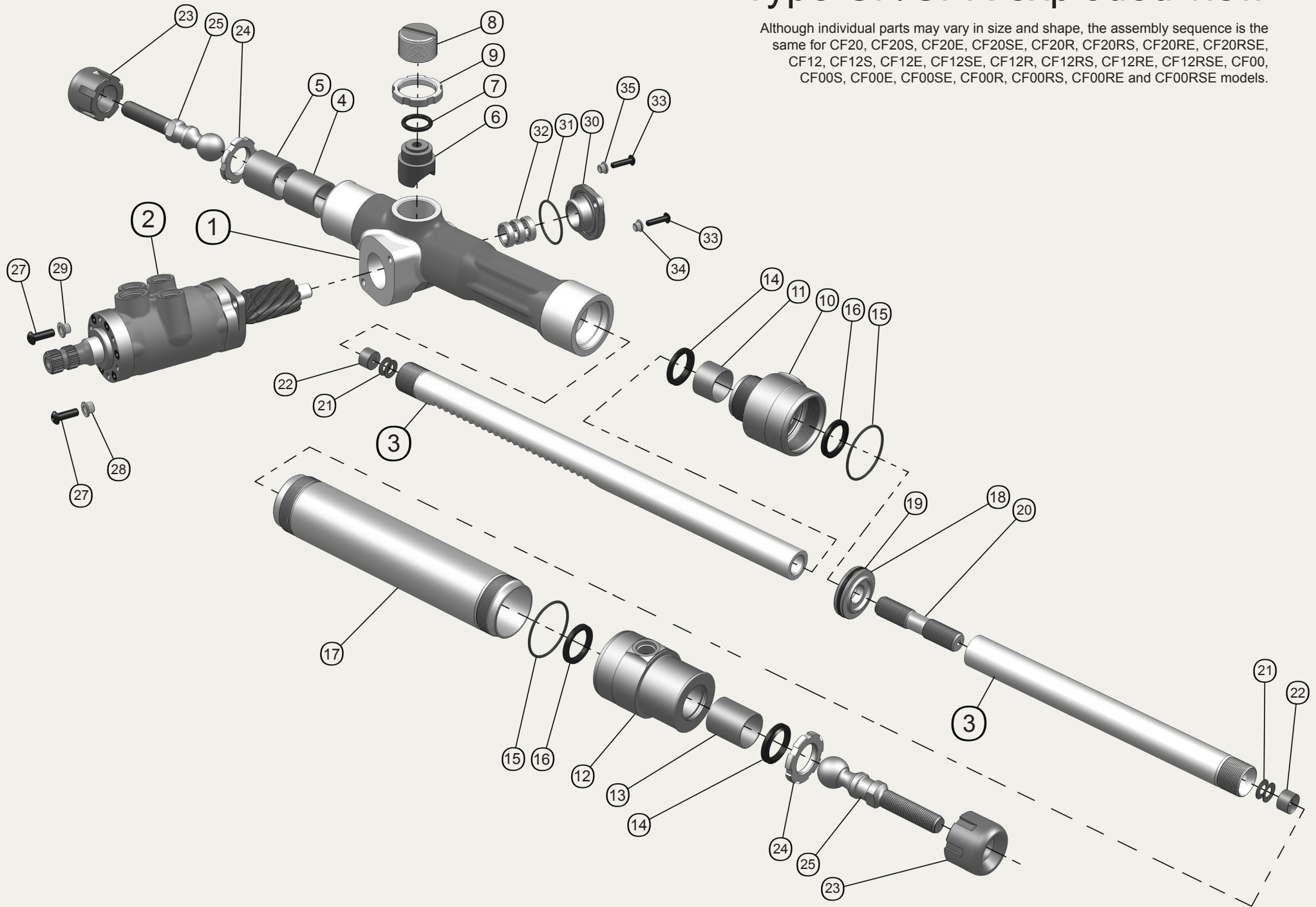


# Type CF/CFR exploded view

Although individual parts may vary in size and shape, the assembly sequence is the same for CF20, CF20S, CF20E, CF20SE, CF20R, CF20RS, CF20RE, CF20RSE, CF12, CF12S, CF12E, CF12SE, CF12R, CF12RS, CF12RE, CF12RSE, CF00, CF00S, CF00E, CF00SE, CF00R, CF00RS, CF00RE and CF00RSE models.



# Type CF/CFR parts list

(NOTE: Variations of some of the basic part numbers shown below can run into the hundreds. Parts marked \* are custom made; to duplicate these we need the original rack serial number or the model number from the CAD file.)

Dwg no.	Part no.	Description	Dwg no.	Part no.	Description
1	CF20-100 CF12-100 CF00-100 CFR20-100 CFR12-100 CFR00-100	Housing* <i>These basic castings are specifically machined for one of seven individual steering ratios as well as other model variations. The original rack serial number or the model number from the CAD file is needed to duplicate a housing.</i>	16	CF159	Loaded lip seal
2	CF800 CF900	Servo/pinion assembly* (refer to servo exploded view) <i>Any valve profile is available in any CF servo. However, the pinion (number of teeth, helix angle and hand) will only fit the corresponding rack housing.</i>	17	CF160 CF160X	Cylinder tube for 1.63 piston Cylinder tube for 1.75 piston <i>The length of the tube is specific to the rack serial number or the model number from the CAD file.</i>
3	CF200A & B	Rackshaft* <i>The length, the location of the piston, and the number and location of the rack teeth are specific to the serial number or the model number from the CAD file.</i>	18	CF171 CF171X	Piston, 1.63 diameter Piston, 1.75 diameter
4	CF101A	Rack bushing, 1 x 1.25OD x 1.25L	19	CF172 CF172X	O-ring for 1.63 piston O-ring for 1.75 piston
5	CF101B	Rack bushing, 1 x 1.312OD x 1.25L	20	CF250	Rack stud
6	CF102	Snubber	21	CF403 CF404	Belleville spring Belleville spring
7	CF103	Snubber O-ring	22	CF405	Preloader
8	CF104	Snubber adjusting screw	23	CF410	Monoball adjuster
9	CF105	Snubber lock nut	24	CF411	Monoball lock nut
10	CF151 CF151X	Cylinder adapter for 1.63 piston Cylinder adapter for 1.75 piston	25	CF412	Monoball stud
11	CF101C	Rack bushing 1 x 1.125OD x .75L	27	NPN	Servo mounting screws, 1/4-20 x 3/4 Torx IP27 drive (2)
12	CF151B CF151BX	Cylinder end for 1.63 piston Cylinder end for 1.75 piston	28	CF155A	Eccentric bushing for 1/4 screw
13	CF101D	Rack bushing 1 x 1.125OD x 1.25L	29	CF155B	Concentric bushing for 1/4 screw
14	CF157	Rod wiper	30	CF154	Pinion bearing flange
15	CF158 CF158X	O-ring for CF151 and 151B O-ring for CF151X and 151BX	31	CF152	Flange O-ring
			32	CF331	Pinion radial ball bearings (3)
			33	NPN	Pinion flange screws, #10-24 x 3/4 Torx IP25 drive (2)
			34	CF156A	Eccentric bushing, major, for #10 screw
			35	CF156B	Eccentric bushing, minor, for #10 screw