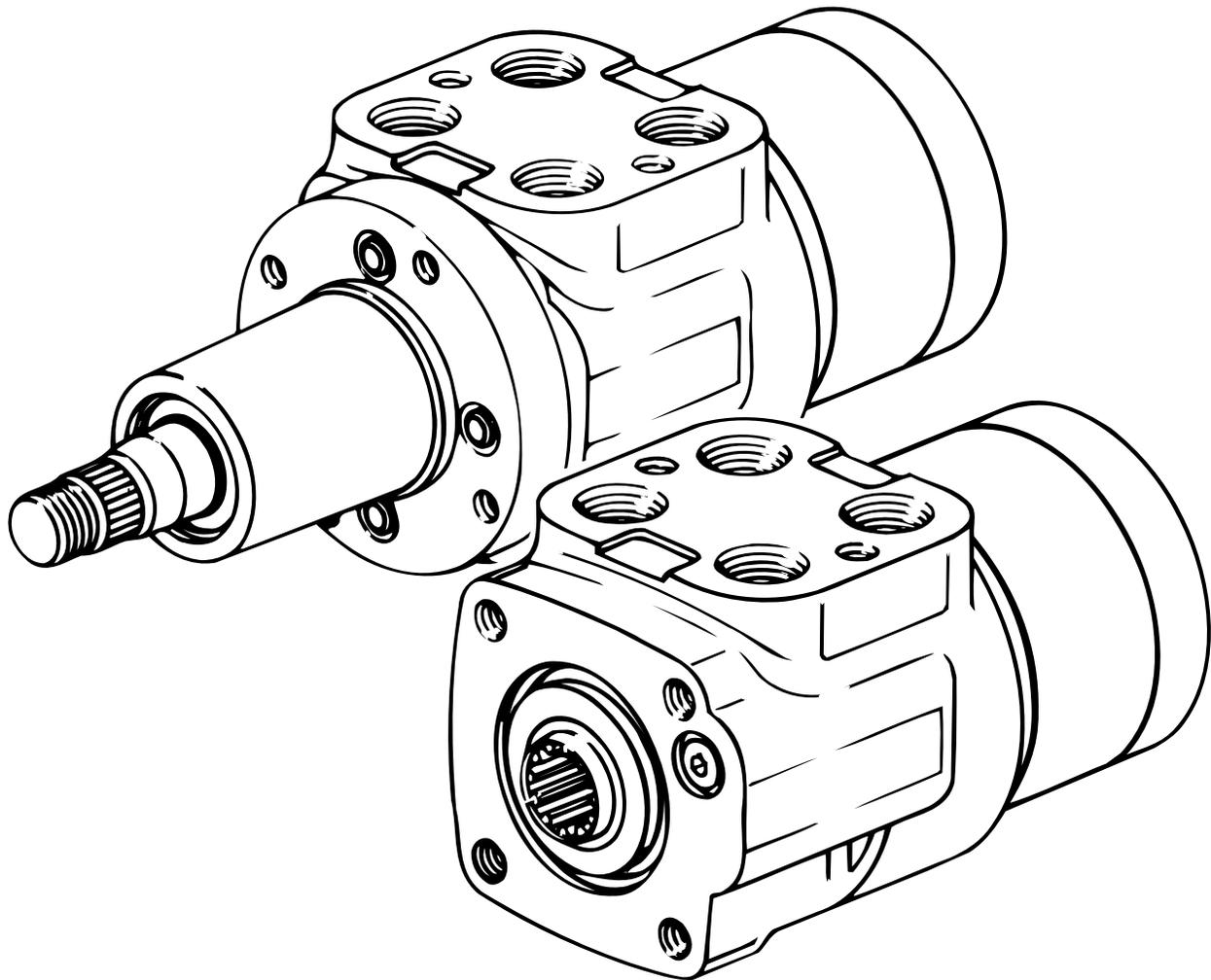




Repair Information



3, 4, 6, and 12 Series
Steering Control Units

001 002

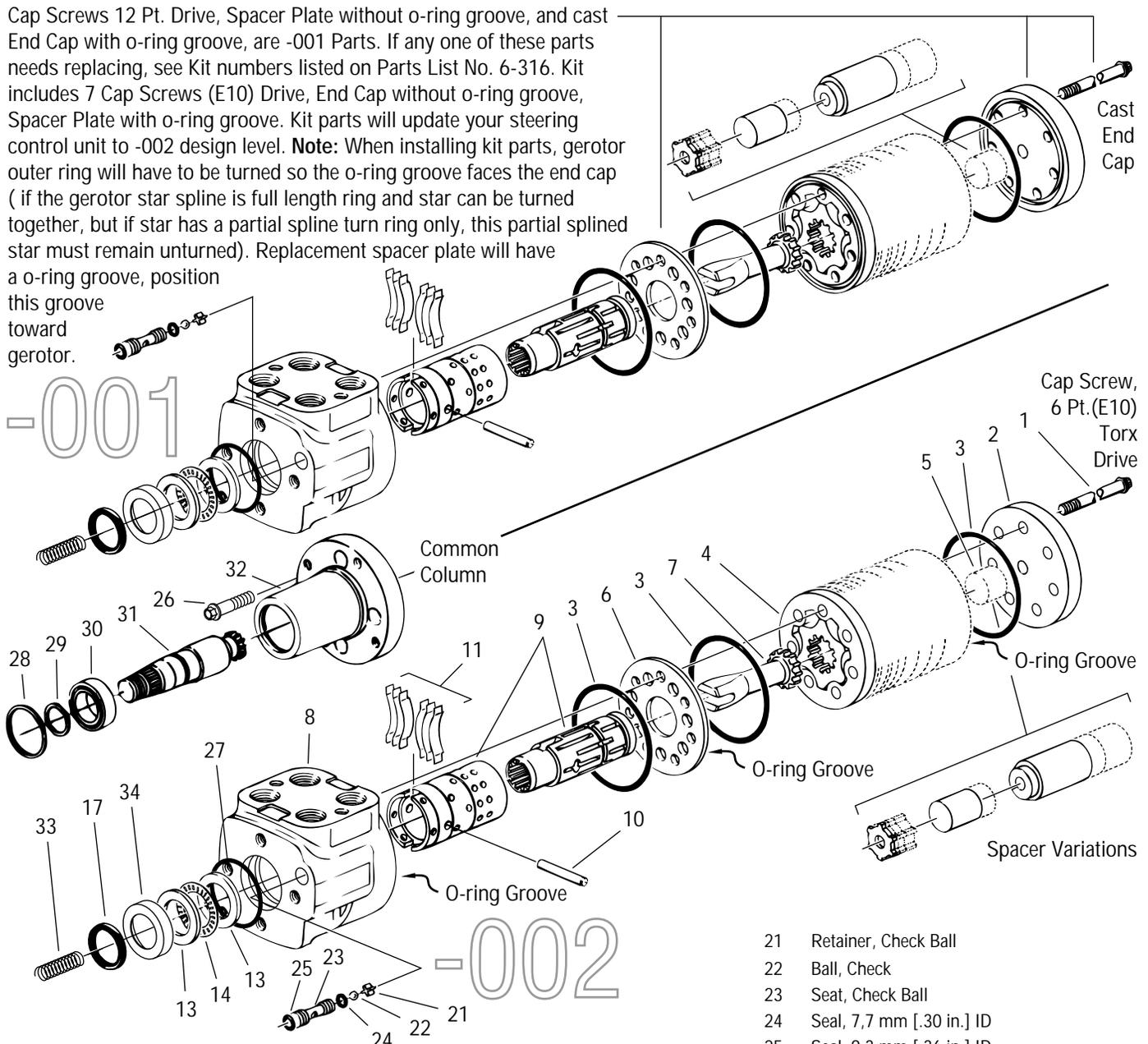
SCU with Integral Column

Steering Control Unit (SCU) with integral column — column disassembly and reassembly procedure on pages 10 through 12.

Steering Control Unit (SCU) — low input torque seal and spring spacer installation (see page 12).

Cap Screws 12 Pt. Drive, Spacer Plate without o-ring groove, and cast End Cap with o-ring groove, are -001 Parts. If any one of these parts needs replacing, see Kit numbers listed on Parts List No. 6-316. Kit includes 7 Cap Screws (E10) Drive, End Cap without o-ring groove, Spacer Plate with o-ring groove. Kit parts will update your steering control unit to -002 design level. **Note:** When installing kit parts, gerotor outer ring will have to be turned so the o-ring groove faces the end cap (if the gerotor star spline is full length ring and star can be turned together, but if star has a partial spline turn ring only, this partial splined star must remain unturned). Replacement spacer plate will have a o-ring groove, position this groove toward gerotor.

-001



- 1 Screw, Cap, 6 Point (E10) Drive
- 2 Cap, End
- 3 Seal, 73,5 mm [2.89 in.] ID
- 4 Gerotor
- 5 Spacer
- 6 Plate, Spacer
- 7 Drive
- 8 Housing

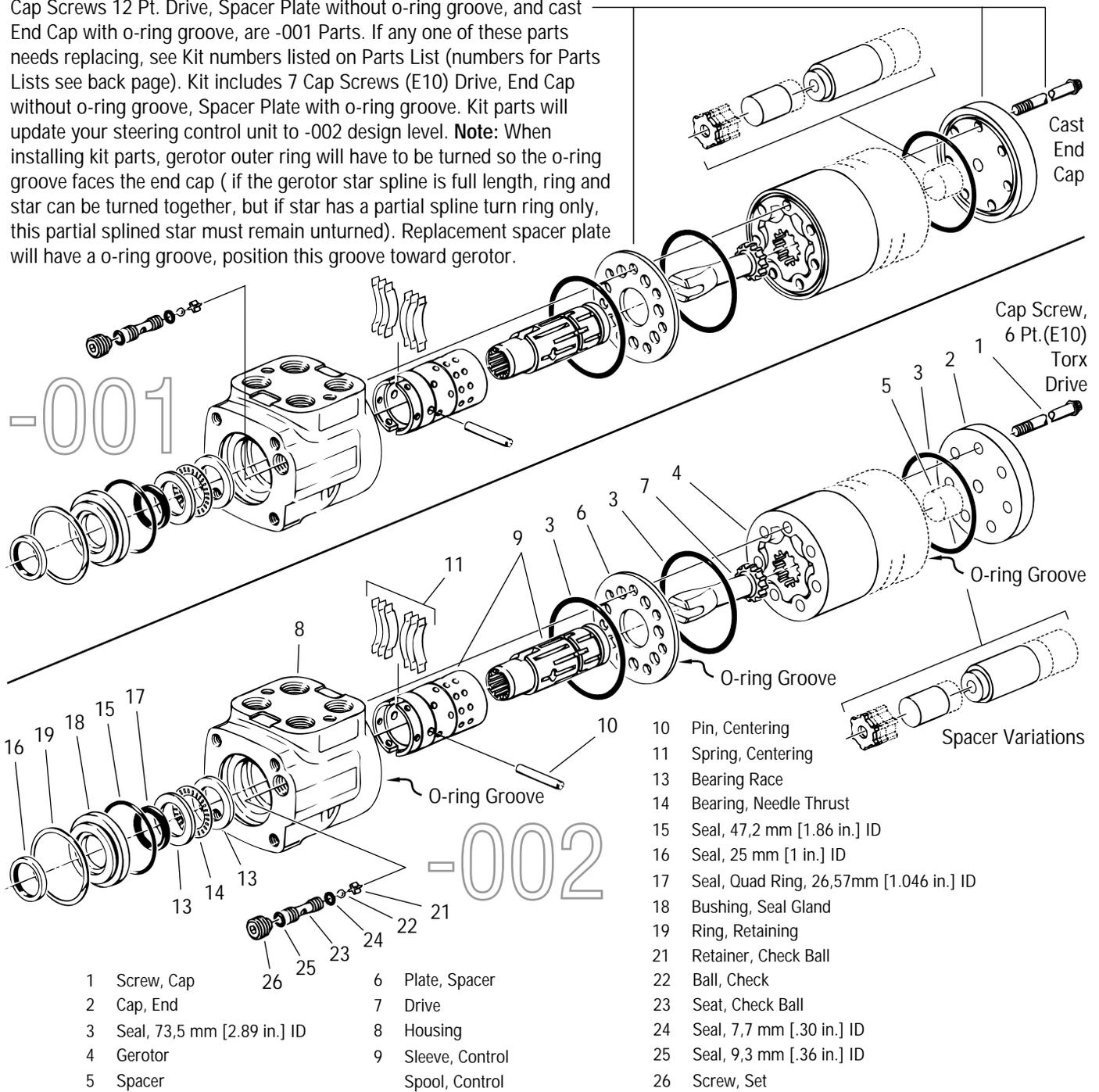
- 9 Sleeve, Control
- 10 Pin, Centering
- 11 Spring, Centering
- 13 Bearing Race
- 14 Bearing, Needle Thrust
- 15 Seal, 47,2 mm [1.86 in.] ID
- 17 Seal, Quad Ring, 26,57mm [1.046 in.] ID

- 21 Retainer, Check Ball
- 22 Ball, Check
- 23 Seat, Check Ball
- 24 Seal, 7,7 mm [.30 in.] ID
- 25 Seal, 9,3 mm [.36 in.] ID
- 26 Screw, Cap, 12 Point Drive
- 27 Seal, 49,3 mm [1.94 in.] OD
- 28 Ring, Retaining (bore)
- 29 Ring, Retaining (shaft)
- 30 Bearing Assembly, Control Column
- 31 Shaft, Control
- 32 Column, Steering Control
- 33 Spring
- 34 Bearing Locator

SCU without Column

Steering Control Unit (SCU) — low input torque seal and spring spacer installation (see page 12).

Cap Screws 12 Pt. Drive, Spacer Plate without o-ring groove, and cast End Cap with o-ring groove, are -001 Parts. If any one of these parts needs replacing, see Kit numbers listed on Parts List (numbers for Parts Lists see back page). Kit includes 7 Cap Screws (E10) Drive, End Cap without o-ring groove, Spacer Plate with o-ring groove. Kit parts will update your steering control unit to -002 design level. **Note:** When installing kit parts, gerotor outer ring will have to be turned so the o-ring groove faces the end cap (if the gerotor star spline is full length, ring and star can be turned together, but if star has a partial spline turn ring only, this partial splined star must remain unturned). Replacement spacer plate will have a o-ring groove, position this groove toward gerotor.



Tools required for disassembly and reassembly:

- Screwdriver (102-152 mm [4-6 inch] long, 3 mm [1/8 inch] flat blade)
- * 5/16 inch 12 point drive socket 5422 and/or 6 point (E10) drive socket Part No. 64489-000
- Breaker bar wrench
- Torque wrench (30 Nm [275 in-lb capacity])
- Plastic hammer or rubber hammer
- 1/4 inch hex key
- #10-24 Machine screw, 38 mm [1-1/2 inch long]
- Needle nose pliers

The following tool is not necessary for disassembly and reassembly, but is extremely helpful.

- *Spring installation tool 600057-000

* Tools are available by special order — contact Eaton Corporation service department

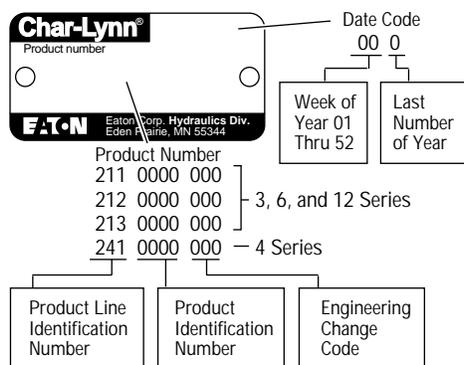
For Additional Literature Contact Eaton Corp. Hydraulics Division 15151 Highway 5 Eden Prairie, MN 55344.

- Specifications and performance data, Catalog No. 11-872
- Replacement part numbers and kit information:
 - 3, 6, and 12 Series steering control units with integral column — Parts Information No. 6-316.
 - 3, and 6 Series steering control units — Parts Information No. 6-317.
 - 12 Series steering control units — Parts Information No. 6-322.
 - 4 Series steering control units — Parts Information No. 6-319

How to Order Replacement Parts

Each Order Must Include the Following:

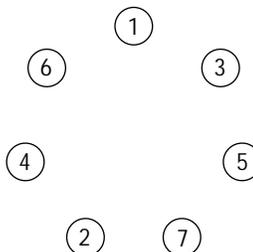
1. Product Number
2. Date Code
3. Part Name
4. Part Number
5. Quantity of Parts



Bolt Torque Information

Continued from Page 10

Torque all screws to 11-17 Nm [100-150 lb-in] evenly, then to final torque (see chart below) in either sequence from page 10 or as shown below.



Seven cap screws for meter section, torque each evenly with less than 5% variation to value shown below and to satisfy travel limit slip rate and *manual input torque requirement*.

Displ. cm ³ /r [in ³ /r]	Bolt Torque ± 1 Nm [±10 lb-in]	Manual Input Torque Limit Max.
45 [2.8]	23 Nm [205 lb-in]	3 Nm [30 lb-in]
60 [3.6]	27 Nm [235 lb-in]	3 Nm [30 lb-in]
75 [4.5]	27 Nm [235 lb-in]	3 Nm [30 lb-in]
95 [5.9]	27 Nm [235 lb-in]	3 Nm [30 lb-in]
120 [7.3]	27 Nm [235 lb-in]	3 Nm [30 lb-in]
145 [8.9]	27 Nm [235 lb-in]	3 Nm [30 lb-in]
160 [9.7]	28 Nm [250 lb-in]	4 Nm [35 lb-in]
185 [11.3]	28 Nm [250 lb-in]	5 Nm [40 lb-in]
230 [14.1]	30 Nm [265 lb-in]	5 Nm [45 lb-in]
295 [17.9]	30 Nm [265 lb-in]	6 Nm [50 lb-in]
370 [22.6]	30 Nm [265 lb-in]	8 Nm [70 lb-in]
460 [28.2]	30 Nm [265 lb-in]	9 Nm [80 lb-in]
590 [35.9]	32 Nm [280 lb-in]	11 Nm [95 lb-in]
740 [45.1]	32 Nm [280 lb-in]	14 Nm [120 lb-in]

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 Eden Prairie, MN 55344
 Telephone (888) 258-0222
 Fax (952) 974-7722

46 New Lane, Havant
 Hampshire, P09 2NB
 Telephone (44) 23 92 486 451
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