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**SERVICE PARTS LIST**

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**Service Parts List**

# **TDSH / GDSH / TDSB**

## **ROTARY SCREW COMPRESSORS**

**MODELS: 163 through 355**

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### HOW TO USE SERVICE PARTS LIST

This Service Parts List is for standard Frick *TDSH / GDSH / TDSB* Rotary Screw Compressors, Models 163 through 355. GDSH models are the same as TDSH 163-283 with the exception of a class 300 suction flange rotor housing. Compressors built with special options, modifications, or conversions are not taken into consideration.

This Service Parts List provides identification for detail parts by Figure and Index Number, Item Number and Description. To determine correct replacement, locate item on Figure 1, 2, etc., note index number, refer to corresponding index number in parts list for item number and description. Quantity per assembly is located in QTY. column. Unit of measure is always "each" unless specified otherwise in Quantity column. When Ref. is in QTY. column, this means that the Item Number is for reference only and is not necessarily a service replacement part. Contact Baltimore Parts Center for more information. REV. (Revision) column tells the level of the engineering drawing used here.

The Numerical Parts List can be used to locate a specific item in the Service Parts List. Look for the part by Frick Item Number and it will refer you to the Figure and Index Number where it is located.

Abbreviations found in this manual include:

A/R..... As Required

N/A..... Not Available

**NOTE: PLEASE PROVIDE FRICK ORDER NUMBER, MODEL NUMBER, AND SERIAL NUMBER WHEN REQUESTING A QUOTATION OR PLACING AN ORDER. FAILURE TO INCLUDE THIS INFORMATION MAY DELAY PROCESSING OF YOUR REQUEST. MODEL AND SERIAL NUMBER PLATE IS FOUND ON THE ROTOR CASING ASSEMBLY.**

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**RECOMMENDED SPARE PARTS - CURRENT DESIGN**

| DESCRIPTION                                  | 163 TDSH <sup>(7)</sup> | 193 TDSH <sup>(7)</sup> | 233 TDSH <sup>(7)</sup> | 283 TDSH <sup>(7)</sup> |
|--|-------------------------|-------------------------|-------------------------|-------------------------|
| Thrust Bearing Kit <sup>(1)</sup>            | 111Q0042682             | 111Q0042683             | 111Q0042684             | 534M0269G01             |
| Complete Bearing Kit                         | 534M0556G01             | 534M0556G02             | 534M0556G03             | 534M0556G04             |
| O-ring and Gasket Kit                        | 535M0054G01             | 535M0055G01             | 535M0057G01             | 535M0059G01             |
| Shaft Seal Kit <sup>(3)</sup>                | 534M0163G01             | 534M0163G02             | 534M0163G03             | 534M0163G04             |
| Balance Piston Kit <sup>(5)</sup>            | 534M0557G01             | 534M0557G02             | 534M0557G03             | 534M0557G04             |
| Slide Valve Potentiometer Kit <sup>(4)</sup> | 534D0523G02             | 534D0523G02             | 534D0523G02             | 534D0523G02             |
| Slide Stop Potentiometer Kit                 | 111Q0041148             | 111Q0041148             | 111Q0041148             | 111Q0041148             |
| Compressor Tool Kit <sup>(2)</sup>           | 534A0122G01             | 534A0123G01             | 534A0124G01             | 534A0125G01             |
| Lip Seal Kit <sup>(3)</sup>                  | —                       | —                       | —                       | —                       |

Current design vs  
Original design

| DESCRIPTION                                  | 355 TDSH    | 355 TDSB       |
|--|-------------|----------------|
| Thrust Bearing Kit <sup>(1)</sup>            | 534M0027G02 | <sup>(6)</sup> |
| Complete Bearing Kit                         | 534A0919G01 | 534A0920G01    |
| O-ring and Gasket Kit                        | 534M0027G03 | 534M0027G03    |
| Shaft Seal Kit <sup>(3)</sup>                | 534M0163G05 | 534M0163G05    |
| Balance Piston Kit                           | 534M0557G05 | 534M0557G05    |
| Slide Valve Potentiometer Kit <sup>(4)</sup> | 534D0523G02 | 534D0523G02    |
| Slide Stop Potentiometer Kit                 | 111Q0041148 | 111Q0041148    |
| Compressor Tool Kit <sup>(2)</sup>           | 534A0213G01 | 534A0213G01    |
| Lip Seal Kit <sup>(3)</sup>                  | 534M0280G01 | 534M0280G01    |

Note: When stocking the above, the quantity should be adjusted to meet your individual requirements.

- (1) Current **283 TDSH** Thrust Bearing Kit items are included in Complete Bearing Kit. See page 31 for serial number breaks regarding *current* and *original* kit.
- (2) Master Tool Kit 534A0121G01 services all models 163 through 283.
- (3) Lip Seal Kit items are included in Shaft Seal Kit. For 355 models made prior to lip seal installation (2 January 1994), use Lip Seal Retrofit Kit 534D0768G01, if updating is desired.
- (4) Can be used when replacing Maury Potentiometer on units shipped prior to 7/90.
- (5) See page 31 for serial number breaks regarding *current* and *original* **283 TDSH** Balance Piston Kit.
- (6) No kit. Order two of 534B0101H28 Bearing.
- (7) Parts for GDSH compressors are the same as TDSH 163-283 with the exception of the rotor housing. The GDSH has a class 300 suction flange.

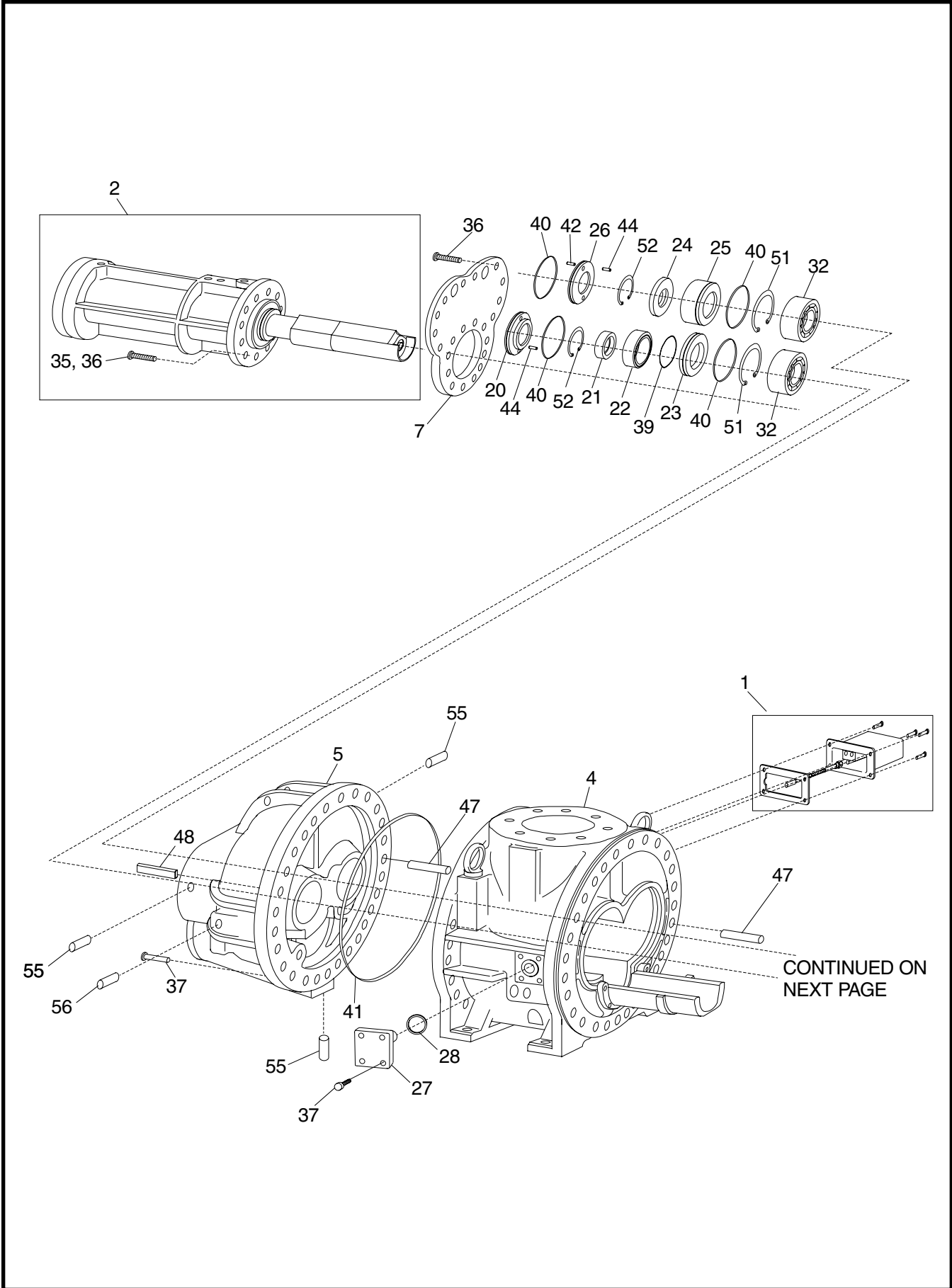
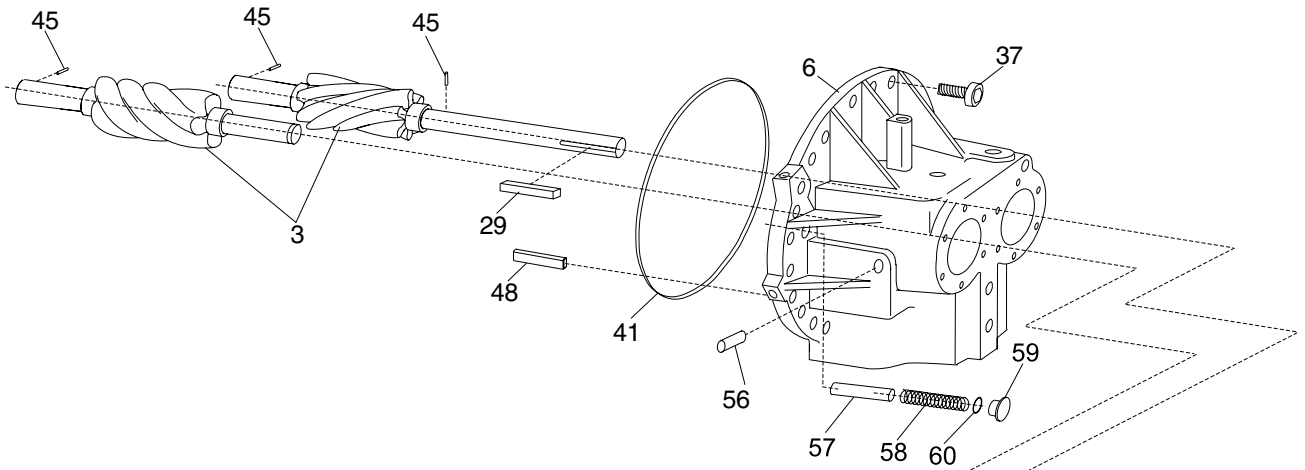


Figure 1a. Screw Compressor, 163.

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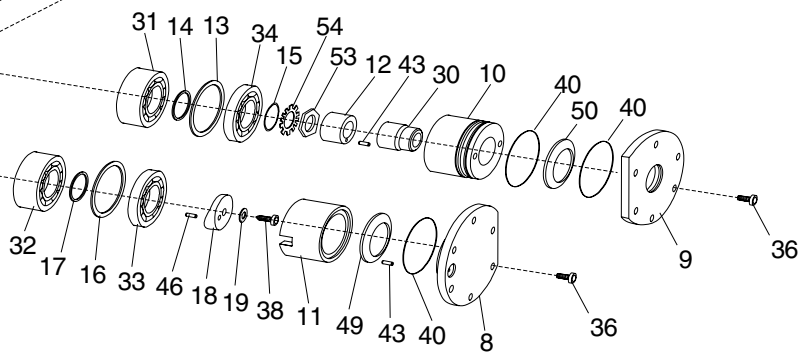


Figure 1b. Screw Compressor, 163.

| FIG. & INDEX | ITEM NUMBER | DESCRIPTION                                       | QTY. | REV. |
|--------------|-------------|---|------|------|
| 1—           | 534E0168G01 | TDSH 163S, Screw Compressor, New                  | Ref. | Y    |
|              | 534E0168G02 | TDSH 163L, Screw Compressor, New                  | Ref. | Y    |
|              | 534E0168S01 | TDSH 163S, Screw Compressor, Rebuilt              | Ref. |      |
|              | 534E0168S02 | TDSH 163L, Screw Compressor, Rebuilt              | Ref. |      |
|              | 534E0514G01 | TDSH 163S, Screw Compressor, Handwheel, New       | Ref. | J    |
|              | 534E0514G02 | TDSH 163L, Screw Compressor, Handwheel, New       | Ref. | J    |
| —1           | —           | Slide Stop Indication Assembly (See Figure 17)    | Ref. |      |
| —2           | —           | Slide Valve/Stop Assembly (See Figures 2 & 3)     | Ref. |      |
| —3           | 534A0082G02 | Rotor Pair, TDSH 163S                             | 1    |      |
|              | 534A0083G02 | Rotor Pair, TDSH 163L                             | 1    |      |
| —4           | 534D0133G01 | Assembly, Casing, Rotor, TDSH 163S                | 1    |      |
|              | 534C0194H01 | Plug, Pipe, 1/4-18 NPTF w/.201" Orifice           | 1    |      |
|              | 534D0133G02 | Assembly, Casing, Rotor, TDSH 163L                | 1    |      |
|              | 534C0194H02 | Plug, Pipe, 1/4-18 NPTF w/.218" Orifice           | 1    |      |
| —5           | 534E0026C01 | Casing, Inlet                                     | 1    |      |
| —6           | 534E0404C01 | Casing, Discharge                                 | 1    |      |
| —7           | 534D0051C01 | Cover, Inlet                                      | 1    |      |
| —8           | 534C0076C01 | Cover, Outlet                                     | 1    |      |
| —9           | 534C0155C01 | Housing, Seal                                     | 1    |      |
| —10          | 534C0154C01 | Spacer, Seal Housing                              | 1    |      |
| —11          | 534C0150C01 | Sleeve, Distance                                  | 1    |      |
| —12          | 534B0034H01 | Ring, Seal Distance                               | 1    |      |
| —13          | 534C0162H01 | Plate, Male Bearing Backup ▲ ◆                    | 1    |      |
| —14          | 534B0097H01 | Washer, Male Adjusting ▲ ◆                        | 1    |      |
| —15          | 534B0095H01 | Spacer, Bearing                                   | 1    |      |
| —16          | 534C0629H01 | Plate, Female Bearing Backup ▲ ◆                  | 1    |      |
| —17          | 534B0290H01 | Washer, Female Bearing Adjusting ▲ ◆              | 1    |      |
| —18          | 534B0100H01 | Plate, Bearing                                    | 1    |      |
| —19          | 534B0103H01 | Washer  | 1    |      |
| —20          | 534C0075C01 | Cover, Female Inlet Bore, original <sup>(3)</sup> | 1    |      |
|              | 534D0496C01 | Cover, Female Inlet Bore, current <sup>(3)</sup>  | 1    |      |
| —21          | 534B0043H01 | Piston, Female Balance <sup>(3)</sup> ★           | 1    |      |
| —22          | 534B0046C01 | Sleeve, Female Balance Piston <sup>(3)</sup> ★    | 1    |      |
| —23          | 534B0040H01 | Ring, Female <sup>(3)</sup> ★                     | 1    |      |
| —24          | 534C0281H01 | Piston, Male Balance ★                            | 1    |      |
| —25          | 534C0282C01 | Sleeve, Male Balance Piston ★                     | 1    |      |
| —26          | 534C0283C01 | Cover, Male Inlet Bore                            | 1    |      |
| —27          | 111Q0011833 | Flange, Male Blank, 1-1/4"                        | 1    |      |
| —28          | 959A0057H04 | Gasket, Flange ■                                  | 1    |      |
| —29          | 534A0662H01 | Key, Square                                       | 1    |      |
| —30          | 534C0701H01 | Assembly, Shaft Seal, Rotating Seat ●             | 1    |      |
| —31          | 534B0004H08 | Bearing, Roller ▲                                 | 1    |      |
| —32          | 534B0004H09 | Bearing, Roller ▲                                 | 3    |      |
| —33          | 534B0101H25 | Bearing, Ball, Four Point Contact ▲ ◆             | 1    |      |
| —34          | 534B0101H19 | Bearing, Ball, Four Point Contact ▲ ◆             | 1    |      |
| —35          | 111Q0740738 | Capscrew, Socket Head, M12 x 90mm                 | 8    |      |
| —36          | 111Q0740739 | Capscrew, Socket Head, M12 x 45mm                 | 23   |      |
| —37          | 111Q0740743 | Capscrew, Socket Head, M16 x 55mm                 | 44   |      |
|              | 111Q0740742 | Capscrew, Socket Head, M16 x 80mm                 | 8    |      |
| —38          | 534A0076H01 | Capscrew, Socket Head, 3/4-10 x 2" ▲ ◆            | 1    |      |
| —39          | 980A0012B61 | O-ring ■ ★  | 1    |      |
| —40          | 980A0012B76 | O-ring ■ ● ★ ◆                                    | 7    |      |
| —41          | 980A0012H92 | O-ring ■  | 2    |      |
| —42          | 534A0038H02 | Pin, Spring, .187 x .625" ★                       | 1    |      |

| FIG. & INDEX   | ITEM NUMBER | DESCRIPTION                                    | QTY. | REV. |
|--|-------------|--|------|------|
| —43  | 534A0038H05 | Pin, Spring, .125 x .500" ●▲◆                  | 2    |      |
| —44  | 534A0037H02 | Pin, Dowel, 5m6 x 12mm <sup>(3)</sup> ★        | 1-2  |      |
| —45  | 534A0037H12 | Pin, Dowel, 5h8 x 10mm <sup>(3)</sup> ★        | 2-3  |      |
| —46  | 534A0037H13 | Pin, Dowel, 5h8 x 24mm ◆▲                      | 1    |      |
| —47  | 534B0149H01 | Pin, Dowel, 20 x 70mm                          | 2    |      |
| —48  | 534B0151H01 | Pin, Dowel, 20 x 70mm, Special                 | 2    |      |
| —49  | 534B0102H01 | Washer, Spring                                 | 1    |      |
| —50  | 534B0102H02 | Washer, Spring ●                               | 1    |      |
| —51  | 534B0014H09 | Ring, Retaining ▲                              | 2    |      |
| —52  | 534B0014H10 | Ring, Retaining ★                              | 1-2  |      |
| —53  | 534A0035H04 | Locknut  | 1    |      |
| —54  | 534B0125H03 | Lockwasher ◆▲                                  | 1    |      |
| —55  | 944A0008H03 | Plug, Pipe, 3/8-18 NPTF                        | 5    |      |
| —56  | 944A0008H05 | Plug, Pipe, 3/4-14 NPTF                        | 2    |      |
| —57  | 534A0446H01 | Plug, Economizer                               | 1    |      |
| —58  | 534A0219H01 | Spring   | 1    |      |
| —59  | 944A0228H10 | Plug, O-ring, 1-5/16-12 UNF, Straight Thread   | 1    |      |
| —60  | 980A0012K69 | O-ring ■                                       | 1    |      |
|  |             | Recommended Spare Parts/Service Parts Kits     |      |      |
|  | 534M0556G01 | ▲ Complete Bearing Kit                         | 1    |      |
|  | 111Q0042682 | ◆ Thrust Bearing Kit <sup>(1)</sup>            | 1    |      |
|  | 535M0054G01 | ■ O-ring and Gasket Kit <sup>(2)</sup>         | 1    |      |
|  | 534M0163G01 | ● Shaft Seal Kit                               | 1    |      |
|  | 534M0557G01 | ★ Balance Piston Kit                           | 1    |      |
|  | 534A0122G01 | Compressor Tool Kit (For Disassembly/Assembly) | 1    |      |
| <p>(1) Thrust Bearing Kit items are included in Complete Bearing Kit.</p> <p>(2) O-ring and Gasket Kit also contains appropriate suction and discharge gaskets.</p> <p>(3) <i>Female balance piston, -sleeve and -ring</i> are deleted beginning with s.n. 1614A and 1926B. Exceptions are 1609A, 1611A, 1613A, and 1925B. <i>Female inlet bore cover</i> changed at the same time. Balance Piston Kit will continue to include these items (except cover) for universal field service. O-ring Kits are unaffected. Factory recommends you maintain unit with <i>Female Balance Piston</i> and related parts intact.</p> |             |  |      |      |

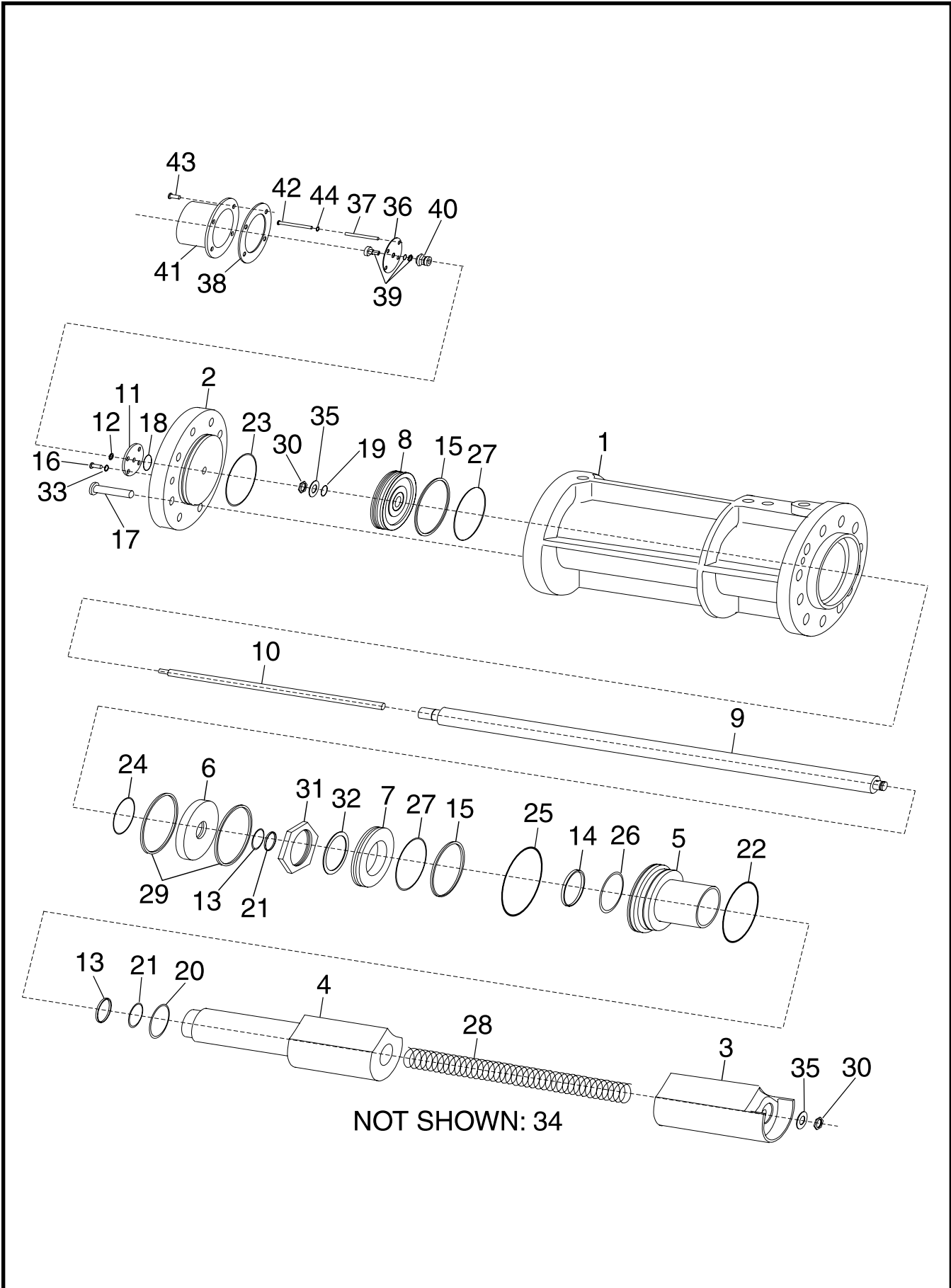


Figure 2. Slide Valve/Stop Assembly, 163.



| FIG. & INDEX | ITEM NUMBER | DESCRIPTION   | QTY. | REV. |
|--------------|-------------|---|------|------|
| 2—           | 534E0168    | TDSH 163 Slide Valve/Stop Assembly                                | Ref. | Y    |
| —1           | 534D0052C01 | Cylinder  | 1    |      |
| —2           | 534D0190C01 | Cover, Cylinder   | 1    |      |
| —3           | 534D0056C01 | Valve, Slide, TDSH 163S   | 1    |      |
|              | 534D0054C01 | Valve, Slide, TDSH 163L   | 1    |      |
| —4           | 534C0080C01 | Stop, Slide, TDSH 163S  | 1    |      |
|              | 534C0079C01 | Stop, Slide, TDSH 163L  | 1    |      |
| —5           | 534C0077C01 | Cover, Slide Stop   | 1    |      |
| —6           | 534B0045C01 | Cover, Internal Cylinder  | 1    |      |
| —7           | 534B0041C01 | Piston, Slide Stop  | 1    |      |
| —8           | 534B0042C01 | Piston, Spindle   | 1    |      |
| —9           | 534D0464G01 | Assembly, Spindle, TDSH 163S                                      | 1    |      |
|              | 534D0464G02 | Assembly, Spindle, TDSH 163L                                      | 1    |      |
| —10          | 534C0186H01 | Shaft, Potentiometer, TDSH 163S                                   | 1    |      |
|              | 534C0186H02 | Shaft, Potentiometer, TDSH 163L                                   | 1    |      |
| —11          | 534C0072H03 | Plate, Backing  | 1    |      |
| —12          | 534B0182H01 | Collar, Clamp   | 1    |      |
| —13          | 534B0006H01 | Seal, Rod ■   | 2    |      |
| —14          | 534B0006H03 | Seal, Rod ■   | 1    |      |
| —15          | 534C0187H01 | Ring, Glyd ■  | 2    |      |
| —16          | 111Q0740730 | Capscrew, Socket Head, M4 x 12mm                                  | 4    |      |
| —17          | 111Q0740723 | Capscrew, Socket Head, M12 x 55mm                                 | 8    |      |
| —18          | 980A0014B30 | O-ring ■  | 1    |      |
| —19          | 980A0012A70 | O-ring ■  | 1    |      |
| —20          | 980A0012A98 | O-ring ■  | 1    |      |
| —21          | 980A0012B52 | O-ring ■  | 2    |      |
| —22          | 980A0012B75 | O-ring ■  | 1    |      |
| —23          | 980A0012B83 | O-ring ■  | 1    |      |
| —24          | 980A0012B84 | O-ring ■  | 1    |      |
| —25          | 980A0012B90 | O-ring ■  | 1    |      |
| —26          | 980A0012H49 | O-ring ■  | 1    |      |
| —27          | 980A0012K05 | O-ring ■  | 2    |      |
| —28          | 534B0036H01 | Spring, Unloader, TDSH 163S                                       | 1    |      |
|              | 534B0038H01 | Spring, Unloader, TDSH 163L                                       | 1    |      |
| —29          | 534B0014H08 | Ring, Retaining ■   | 2    |      |
| —30          | 534B0910H01 | Locknut ■   | 2    |      |
| —31          | 534A0035H02 | Locknut   | 1    |      |
| —32          | 534B0125H02 | Lockwasher ■  | 1    |      |
| —33          | 111Q0940128 | Lockwasher  | 4    |      |
| —34          | 944A0008H03 | Pipe Plug, 3/8-18 NPTF  | 8    |      |
| —35          | 534B0125H01 | Lockwasher ■  | 2    |      |
|              | 534D0523G01 | Slide Valve Indication Mechanism                                  | Ref. |      |
| —36          | 534B0294H01 | Plate, Mounting*  | 1    |      |
| —37          | 534A0263H01 | Support, Tubing*  | 4    |      |
| —38          | 534A0046H01 | Gasket* ■   | 1    |      |
| —39          | 534B0501H01 | Potentiometer*  | 1    |      |
| —40          | 111Q0451313 | Coupling, Flexible*   | 1    |      |
| —41          | 534B0062C01 | Box, Cover  | 1    |      |
| —42          | 111Q0740729 | Capscrew, Socket Head, M5 x 60mm                                  | 4    |      |
| —43          | 111Q0740728 | Capscrew, Socket Head, M6 x 16mm                                  | 4    |      |
| —44          | 111Q0940141 | Lockwasher, 5mm   | 4    |      |
| *            | 534D0523G02 | Slide Valve Potentiometer Kit (also replaces Maury potentiometer) | 1    |      |

■ Item included in O-ring and Gasket Kit. See page 7.

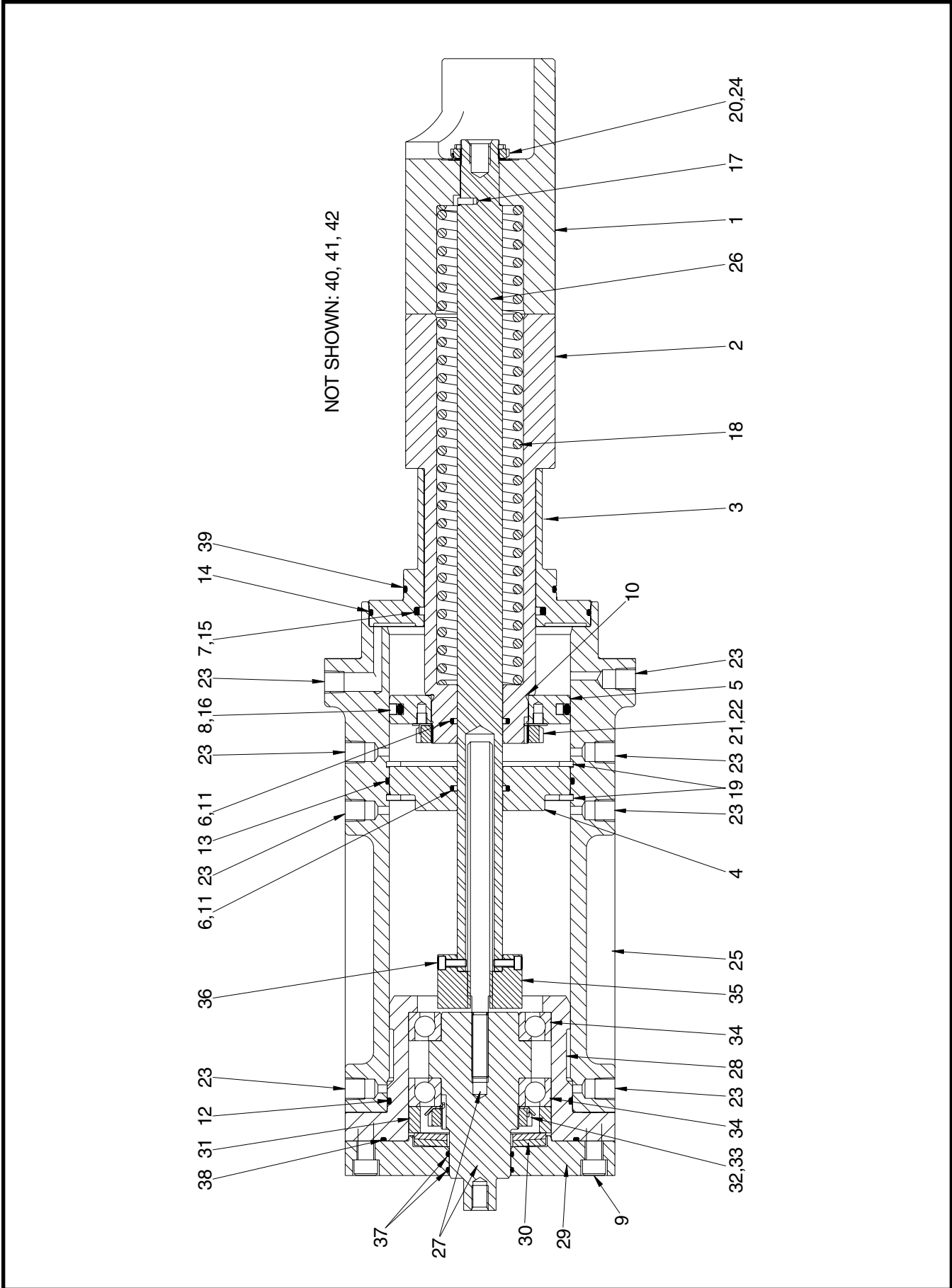


Figure 3. Slide Valve/Stop Assembly, Handwheel, 163

| FIG. & INDEX | ITEM NUMBER | DESCRIPTION                                   | QTY. | REV. |
|--------------|-------------|---|------|------|
| 3—           | 534E0514    | TDSH 163 Slide Valve/Stop Assembly, Handwheel | Ref. | J    |
| —1           | 534D0056C01 | Valve, Slide, TDSH 163S                       | 1    |      |
|              | 534D0054C01 | Valve, Slide, TDSH 163L                       | 1    |      |
| —2           | 534C0080C01 | Stop, Slide, TDSH 163S                        | 1    |      |
|              | 534C0079C01 | Stop, Slide, TDSH 163L                        | 1    |      |
| —3           | 534C0077C01 | Cover, Slide Stop                             | 1    |      |
| —4           | 534B0045C01 | Cover, Internal Cylinder                      | 1    |      |
| —5           | 534B0041C01 | Piston, Slide Stop                            | 1    |      |
| —6           | 534B0006H01 | Seal, Rod ■                                   | 2    |      |
| —7           | 534B0006H03 | Seal, Rod ■                                   | 1    |      |
| —8           | 534C0187H01 | Ring, Glyd, TDSH 163S ■                       | 1    |      |
|              | 534C0187H01 | Ring, Glyd, TDSH 163L ■                       | 2    |      |
| —9           | 111Q0740723 | Capscrew, Socket Head, M12 x 55mm             | 8    |      |
| —10          | 980A0012A98 | O-ring ■                                      | 1    |      |
| —11          | 980A0012B52 | O-ring ■                                      | 2    |      |
| —12          | 980A0012B83 | O-ring ■                                      | 1    |      |
| —13          | 980A0012B84 | O-ring ■                                      | 1    |      |
| —14          | 980A0012B90 | O-ring ■                                      | 1    |      |
| —15          | 980A0012H49 | O-ring ■                                      | 1    |      |
| —16          | 980A0012K05 | O-ring ■                                      | 1    |      |
| —17          | 534A0037H02 | Pin, Dowel                                    | 1    |      |
| —18          | 534B0036H01 | Spring, Unloader, TDSH 163S                   | 1    |      |
|              | 534B0038H01 | Spring, Unloader, TDSH 163L                   | 1    |      |
| —19          | 534B0014H08 | Ring, Retaining ■                             | 2    |      |
| —20          | 534B0910H01 | Locknut ■                                     | 1    |      |
| —21          | 534A0035H02 | Locknut                                       | 1    |      |
| —22          | 534B0125H02 | Lockwasher ■                                  | 1    |      |
| —23          | 944A0008H03 | Pipe Plug                                     | 8    |      |
| —24          | 534B0125H01 | Lockwasher                                    | 1    |      |
| —25          | 534D0902C01 | Cylinder                                      | 1    |      |
| —26          | 534C1054H01 | Spindle, TDSH 163S                            | 1    |      |
|              | 534C1082H01 | Spindle, TDSH 163L                            | 1    |      |
| —27          | 534C1142G01 | Assembly, Shaft                               | 1    |      |
| —28          | 534D1008C01 | Housing, Bearing                              | 1    |      |
| —29          | 534D1009H01 | Cover, Cylinder                               | 1    |      |
| —30          | 534A0518H01 | Washer, Spring, TDSH 163S                     | 2    |      |
|              | 534A0518H01 | Washer, Spring, TDSH 163L                     | 1    |      |
| —31          | 534B0567H01 | Spacer  | 1    |      |
| —32          | 534A0519H01 | Locknut                                       | 1    |      |
| —33          | 534A0520H01 | Lockwasher ■                                  | 1    |      |
| —34          | 534C1170H04 | Bearing, Ball, Angular Contact                | 2    |      |
| —35          | 534B0512H01 | Nut, Spindle                                  | 1    |      |
| —36          | 534A0541H01 | Capscrew, Socket Head, M6 x 16mm              | 8    |      |
| —37          | 333Q0000800 | O-ring ■                                      | 2    |      |
| —38          | 980A0012B86 | O-ring ■                                      | 1    |      |
| —39          | 980A0012B75 | O-ring ■                                      | 1    |      |
|              |             | Not Shown:                                    |      |      |
| —40          | 581B0001H06 | Wheel, Hand                                   | 1    |      |
| —41          | 581A0011H03 | Washer, Spring                                | 1    |      |
| —42          | 901A0045D01 | Capscrew, Hex Head, 1/2-13 UNC x 3/4"         | 1    |      |

■ Item included in O-ring and Gasket Kit. See Page 7.

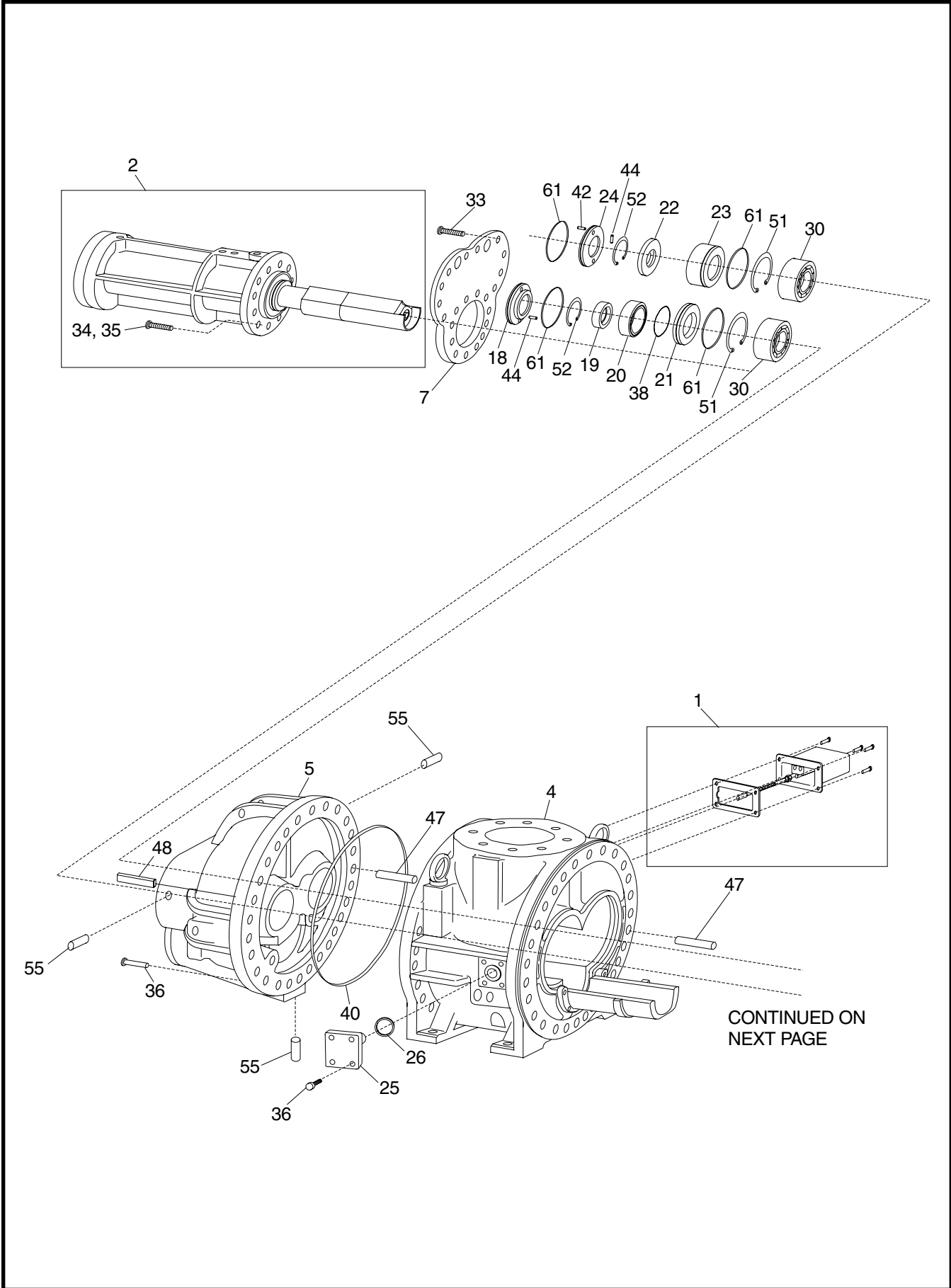


Figure 4a. Screw Compressor, 193.

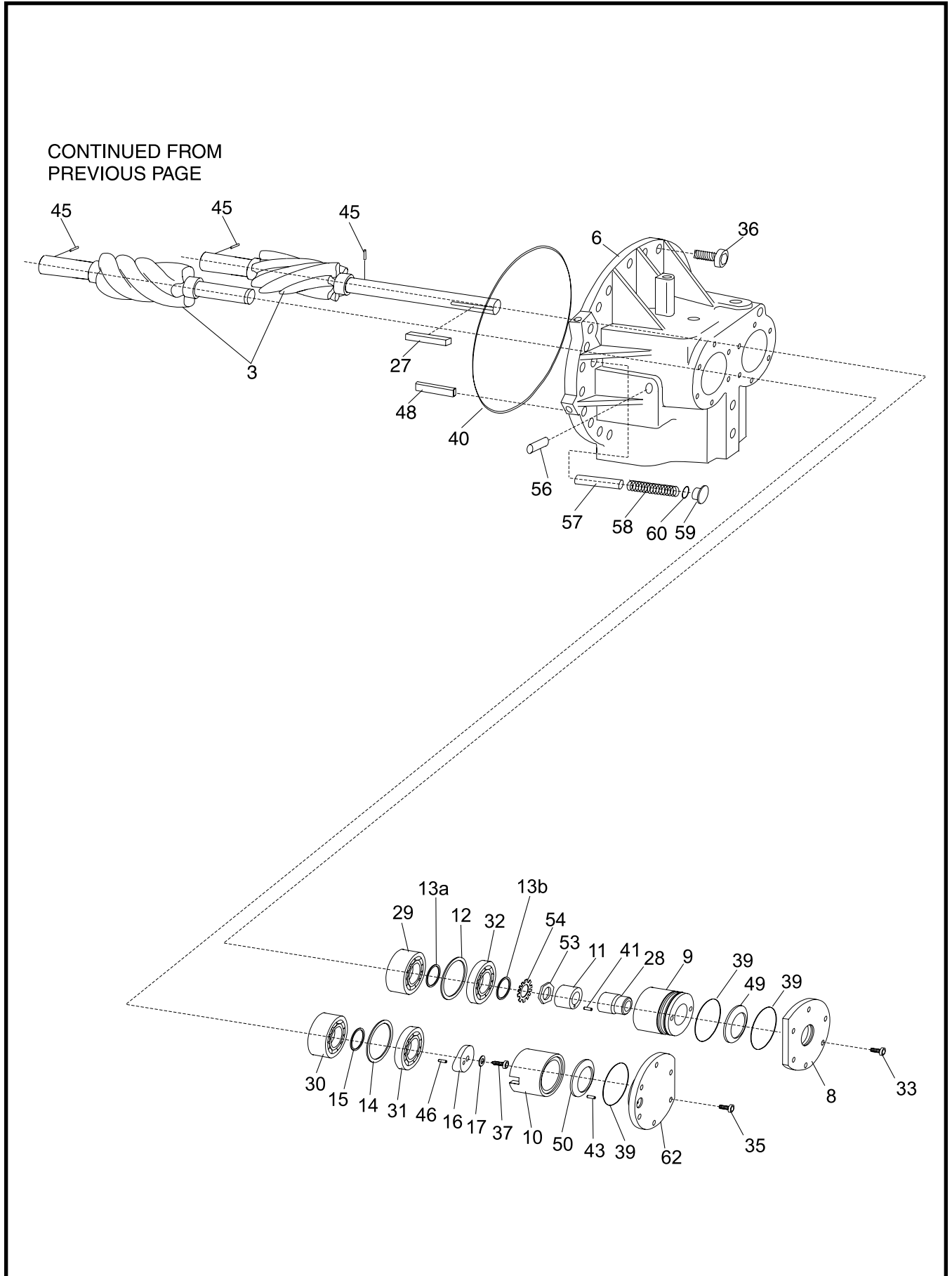


Figure 4b. Screw Compressor, 193.

| FIG. & INDEX | ITEM NUMBER | DESCRIPTION  | QTY. | REV. |
|--------------|-------------|--|------|------|
| 4—           | 534E0169G01 | TDSH 193S, Screw Compressor, New                                     | Ref. | AA   |
|              | 534E0169G02 | TDSH 193L, Screw Compressor, New                                     | Ref. | AA   |
|              | 534E0169S01 | TDSH 193S, Screw Compressor, Rebuilt                                 | Ref. |      |
|              | 534E0169S02 | TDSH 193L, Screw Compressor, Rebuilt                                 | Ref. |      |
|              | 534E0502G01 | TDSH 193S, Screw Compressor, Handwheel, New                          | Ref. | L    |
|              | 534E0502G02 | TDSH 193L, Screw Compressor, Handwheel, New                          | Ref. | L    |
| —1           | —           | Slide Stop Indication Assembly (See Figure 17)                       | Ref. |      |
| —2           | —           | Slide Valve/Stop Assembly (See Figure 5 & 6)                         | Ref. |      |
| —3           | 534A0073G02 | Rotor Pair, TDSH 193S  | 1    |      |
|              | 534A0074G02 | Rotor Pair, TDSH 193L  | 1    |      |
| —4           | 534D0134G01 | Assembly, Casing, Rotor, TDSH 193S                                   | 1    |      |
|              | 534C0194H11 | Plug, Pipe, 3/8-18 NPTF w/.257 " Orifice                             | 1    |      |
|              | 534D0134G02 | Assembly, Casing, Rotor, TDSH 193L                                   | 1    |      |
|              | 534C0194H12 | Plug, Pipe, 3/8-18 NPTF w/.277 " Orifice                             | 1    |      |
| —5           | 534E0023C01 | Casing, Inlet  | 1    |      |
| —6           | 534E0405C01 | Casing, Discharge  | 1    |      |
| —7           | 534D0048C01 | Cover, Inlet   | 1    |      |
| —8           | 534C0138C01 | Housing, Seal  | 1    |      |
| —9           | 534D0121C01 | Spacer, Seal Housing   | 1    |      |
| —10          | 534D0483C01 | Sleeve, Distance   | 1    |      |
| —11          | 534B0024H01 | Ring, Seal Distance  | 1    |      |
| —12          | 534C0175H01 | Plate, Male Bearing Backup ▲ ◆                                       | 1    |      |
| —13a         | 534B0090H01 | Washer, Male Adjusting ▲ ◆   | 1    |      |
| —13b         | 534B0090H01 | Washer, Male Adjusting (not needed for service if not installed) ▲ ◆ | 1    |      |
| —14          | 534C0176H01 | Plate, Female Bearing Backup ▲ ◆                                     | 1    |      |
| —15          | 534B0093H01 | Washer, Female Adjusting ▲ ◆   | 1    |      |
| —16          | 534B0091H01 | Plate, Bearing   | 1    |      |
| —17          | 534B0103H01 | Washer   | 1    |      |
| —18          | 534C0056C01 | Cover, Female Inlet Bore   | 1    |      |
| —19          | 534C0058H01 | Piston, Female Balance ★   | 1    |      |
| —20          | 534C0064C01 | Sleeve, Female Balance Piston ★                                      | 1    |      |
| —21          | 534C0059H01 | Ring, Female ★   | 1    |      |
| —22          | 534C0270H01 | Piston, Male Balance ★   | 1    |      |
| —23          | 534C0269C01 | Sleeve, Male Balance Piston ★  | 1    |      |
| —24          | 534C0268C01 | Cover, Male Inlet Bore   | 1    |      |
| —25          | 111Q0010300 | Flange, Male Blank, 1-1/2"   | 1    |      |
| —26          | 959A0057H05 | Gasket, Flange ■   | 1    |      |
| —27          | 534A0662H02 | Key, Square  | 1    |      |
| —28          | 534C0701H02 | Assembly, Shaft Seal, Rotating Seat ●                                | 1    |      |
| —29          | 534B0004H06 | Bearing, Roller ▲  | 1    |      |
| —30          | 534B0004H07 | Bearing, Roller ▲  | 3    |      |
| —31          | 534B0101H19 | Bearing, Ball, Four Point Contact ▲ ◆                                | 1    |      |
| —32          | 534B0101H20 | Bearing, Ball, Four Point Contact ▲ ◆                                | 1    |      |
| —33          | 111Q0740723 | Capscrew, Socket Head, M12 x 55mm                                    | 15   |      |
| —34          | 111Q0740722 | Capscrew, Socket Head, M12 x 100mm                                   | 8    |      |
| —35          | 111Q0740739 | Capscrew, Socket Head, M 12 x 45mm                                   | 9    |      |
| —36          | 111Q0740743 | Capscrew, Socket Head, M16 x 55mm                                    | 44   |      |
|              | 111Q0740742 | Capscrew, Socket Head, M16 x 80mm                                    | 8    |      |
| —37          | 534A0076H01 | Capscrew, Socket Head, 3/4-10 UNC x 2" ▲ ◆                           | 1    |      |
| —38          | 980A0012B65 | O-ring ■ ★   | 1    |      |
| —39          | 980A0012B84 | O-ring ■ ● ◆   | 3    |      |
| —40          | 980A0012K43 | O-ring ■   | 2    |      |

| FIG. & INDEX | ITEM NUMBER | DESCRIPTION   | QTY. | REV. |
|--------------|-------------|---|------|------|
| —41          | 534A0038H01 | Pin, Spring, .187 x .500" ●   | 1    |      |
| —42          | 534A0038H02 | Pin, Spring, .187 x .625" ★   | 1    |      |
| —43          | 534A0038H05 | Pin, Spring, .125 x .500" ▲ ◆   | 1    |      |
| —44          | 534A0037H03 | Pin, Dowel, 5m6 x 16mm ★  | 2    |      |
| —45          | 534A0037H12 | Pin, Dowel, 5h8 x 10mm ● ★  | 3    |      |
| —46          | 534A0037H14 | Pin, Dowel, 10h8 x 24mm ▲ ◆   | 1    |      |
| —47          | 534B0149H01 | Pin, Dowel, 20 x 70mm   | 2    |      |
| —48          | 534B0151H01 | Pin, Dowel, 20 x 70mm, Special  | 2    |      |
| —49          | 534B0102H04 | Washer, Spring  | 1    |      |
| —50          | 534B0102H05 | Washer, Spring  | 1    |      |
| —51          | 534B0014H08 | Ring, Retaining ▲   | 2    |      |
| —52          | 534B0014H11 | Ring, Retaining ★   | 2    |      |
| —53          | 534A0035H03 | Locknut   | 1    |      |
| —54          | 534B0125H04 | Lockwasher ▲ ◆  | 1    |      |
| —55          | 944A0008H03 | Plug, Pipe, 3/8-18 NPTF   | 3    |      |
| —56          | 944A0008H05 | Plug, Pipe, 3/4-14 NPTF   | 11   |      |
| —57          | 534B0453H01 | Plug, Economizer  | 1    |      |
| —58          | 534A0219H01 | Spring  | 1    |      |
| —59          | 944A0228H11 | Plug, Hex, Straight Thread, 1-5/8—12 UNF  | 1    |      |
| —60          | 980A0012K71 | O-ring ■  | 1    |      |
| —61          | 980A0012B83 | O-ring ■ ★  | 4    |      |
| —62          | 534C0068C01 | Cover, Outlet   | 1    |      |
|              |             | Recommended Spare Parts/Service Parts Kits  |      |      |
|              | 534M0556G02 | ▲ Complete Bearing Kit  | 1    |      |
|              | 111Q0042683 | ◆ Thrust Bearing Kit <sup>(1)</sup>   | 1    |      |
|              | 535M0055G01 | ■ O-ring and Gasket Kit <sup>(2)</sup>  | 1    |      |
|              | 534M0163G02 | ● Shaft Seal Kit  | 1    |      |
|              | 534M0557G02 | ★ Balance Piston Kit  | 1    |      |
|              | 534A0123G01 | Compressor Tool Kit (For Disassembly/Assembly)  | 1    |      |
|              |             | (1) Thrust Bearing Kit items are included in Complete Bearing Kit.  |      |      |
|              |             | (2) O-ring and Gasket Kit also contains appropriate suction and discharge gaskets. O-ring Kit only: 534B0781H01 |      |      |

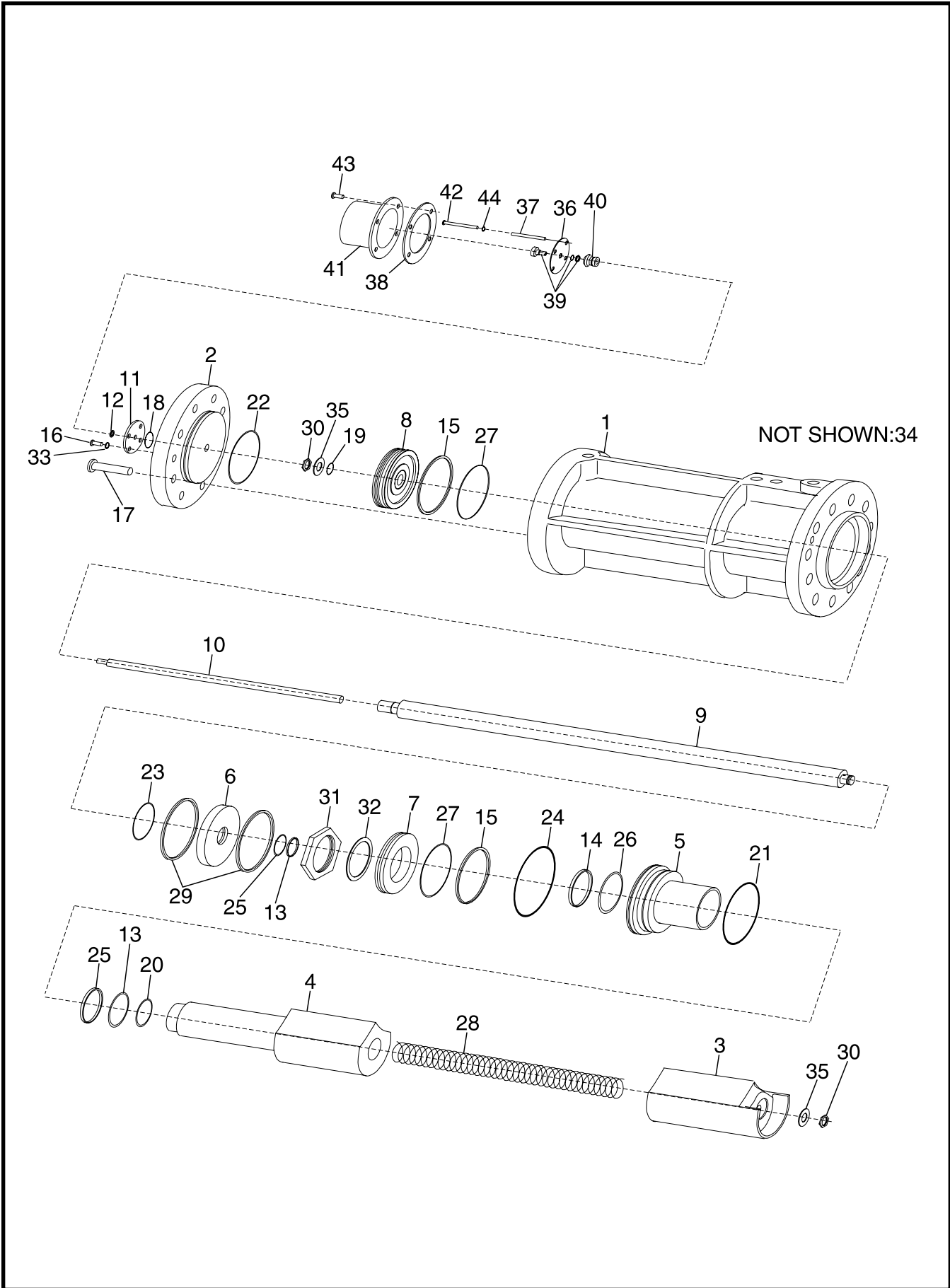


Figure 5. Slide Valve/Stop Assembly, 193.



| FIG. & INDEX | ITEM NUMBER | DESCRIPTION   | QTY. | REV. |
|--------------|-------------|---|------|------|
| 5—           | 534E0169    | TDSH 193 Slide Valve Stop Assembly                                | Ref. | AA   |
| —1           | 534D0047C01 | Cylinder  | 1    |      |
| —2           | 534D0189C01 | Cover, Cylinder   | 1    |      |
| —3           | 534D0063C01 | Valve, Slide, TDSH 193S   | 1    |      |
|              | 534D0046C01 | Valve, Slide, TDSH 193L   | 1    |      |
| —4           | 534D0061C01 | Stop, Valve, TDSH 193S  | 1    |      |
|              | 534D0049C01 | Stop, Valve, TDSH 193L  | 1    |      |
| —5           | 534C0067C01 | Cover, Slide Stop   | 1    |      |
| —6           | 534C0061C01 | Cover, Internal Cylinder  | 1    |      |
| —7           | 534C0062C01 | Piston, Slide Stop  | 1    |      |
| —8           | 534C0063C01 | Piston, Spindle   | 1    |      |
| —9           | 534D0464G03 | Assembly, Spindle, TDSH 193S                                      | 1    |      |
|              | 534D0464G04 | Assembly, Spindle, TDSH 193L                                      | 1    |      |
| —10          | 534C0186H03 | Shaft, Potentiometer, TDSH 193S                                   | 1    |      |
|              | 534C0186H04 | Shaft, Potentiometer, TDSH 193L                                   | 1    |      |
| —11          | 534C0072H03 | Plate, Backing  | 1    |      |
| —12          | 534B0182H01 | Collar, Clamp   | 1    |      |
| —13          | 534B0006H02 | Seal, Rod ■   | 2    |      |
| —14          | 534B0006H03 | Seal, Rod ■   | 1    |      |
| —15          | 534C0187H02 | Ring, Glyd ■  | 2    |      |
| —16          | 111Q0740730 | Capscrew, Socket Head, M4 x 12mm                                  | 4    |      |
| —17          | 111Q0740723 | Capscrew, Socket Head, M12 x 55mm                                 | 8    |      |
| —18          | 980A0014B30 | O-ring ■  | 1    |      |
| —19          | 980A0012A70 | O-ring ■  | 1    |      |
| —20          | 980A0012A98 | O-ring ■  | 1    |      |
| —21          | 980A0012B79 | O-ring ■  | 1    |      |
| —22          | 980A0012B87 | O-ring ■  | 1    |      |
| —23          | 980A0012B88 | O-ring ■  | 1    |      |
| —24          | 980A0012B91 | O-ring ■  | 1    |      |
| —25          | 980A0012H35 | O-ring ■  | 2    |      |
| —26          | 980A0012H49 | O-ring ■  | 1    |      |
| —27          | 980A0012K09 | O-ring ■  | 2    |      |
| —28          | 534C1360H01 | Spring, Unloader, TDSH 193S                                       | 1    |      |
|              | 534C1360H02 | Spring, Unloader, TDSH 193L                                       | 1    |      |
| —29          | 534B0015H01 | Ring, Retaining ■   | 2    |      |
| —30          | 534B0910H01 | Locknut ■   | 2    |      |
| —31          | 534A0035H02 | Locknut   | 1    |      |
| —32          | 534B0125H02 | Lockwasher ■  | 1    |      |
| —33          | 111Q0940128 | Lockwasher, 4mm   | 4    |      |
| —34          | 944A0008H03 | Plug, Pipe, 3/8-18 NPTF   | 9    |      |
| —35          | 534B0125H01 | Lockwasher ■  | 2    |      |
|              | 534D0523G01 | Slide Valve Indication Mechanism                                  | Ref. |      |
| —36          | 534B0294H01 | Plate, Mounting*  | 1    |      |
| —37          | 534A0263H01 | Support, Tubing*  | 4    |      |
| —38          | 534A0046H01 | Gasket* ■   | 1    |      |
| —39          | 534B0501H01 | Potentiometer*  | 1    |      |
| —40          | 111Q0451313 | Coupling, Flexible*   | 1    |      |
| —41          | 534B0062C01 | Box, Cover  | 1    |      |
| —42          | 111Q0740729 | Capscrew, Socket Head, M5 x 60mm                                  | 4    |      |
| —43          | 111Q0740728 | Capscrew, Socket Head, M6 x 16mm                                  | 4    |      |
| —44          | 111Q0940141 | Lockwasher, 5mm   | 4    |      |
| *            | 534D0523G02 | Slide Valve Potentiometer Kit (also replaces Maury potentiometer) | 1    |      |

■ Item included in O-ring and Gasket Kit. See page 15.

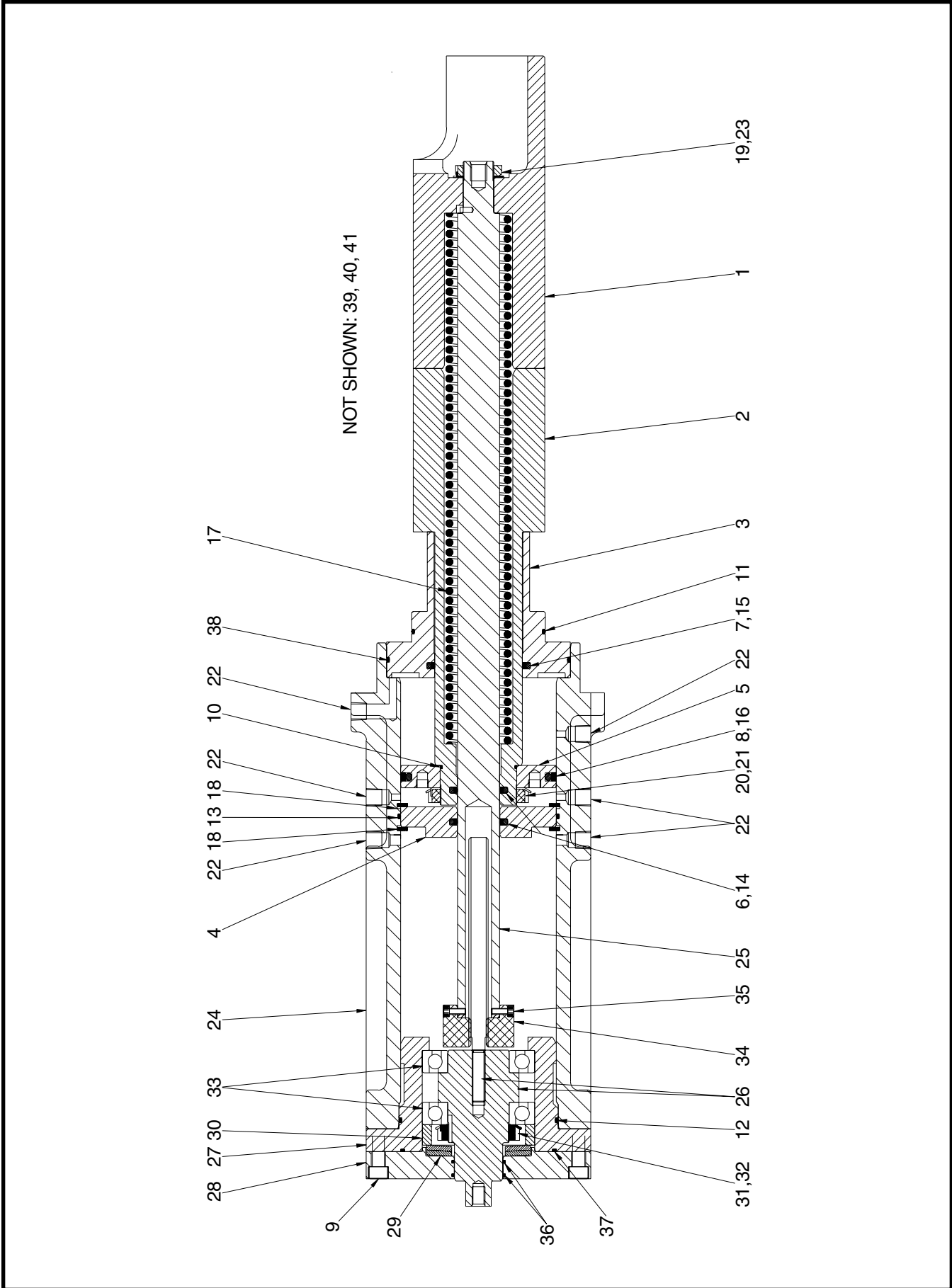


Figure 6. Slide Valve/Stop Assembly, Handwheel, 193.

| FIG. & INDEX | ITEM NUMBER | DESCRIPTION                                   | QTY. | REV. |
|--------------|-------------|---|------|------|
| 6—           | 534E0502    | TDSH 193 Slide Valve/Stop Assembly, Handwheel | Ref. | L    |
| —1           | 534D0063C01 | Valve, Slide, TDSH 193S                       | 1    |      |
|              | 534D0046C01 | Valve, Slide, TDSH 193L                       | 1    |      |
| —2           | 534D0061C01 | Stop, Slide, TDSH 193S                        | 1    |      |
|              | 534D0049C01 | Stop, Slide, TDSH 193L                        | 1    |      |
| —3           | 534C0067C01 | Cover, Slide Stop                             | 1    |      |
| —4           | 534C0061C01 | Cover, Internal Cylinder                      | 1    |      |
| —5           | 534C0062C01 | Piston, Slide Stop                            | 1    |      |
| —6           | 534B0006H02 | Seal, Rod ■                                   | 2    |      |
| —7           | 534B0006H03 | Seal, Rod ■                                   | 1    |      |
| —8           | 534C0187H02 | Ring, Glyd ■                                  | 2    |      |
| —9           | 111Q0740723 | Capscrew, Socket Head, M12 x 55mm             | 8    |      |
| —10          | 980A0012A98 | O-ring ■                                      | 1    |      |
| —11          | 980A0012B79 | O-ring ■                                      | 1    |      |
| —12          | 980A0012B87 | O-ring ■                                      | 1    |      |
| —13          | 980A0012B88 | O-ring ■                                      | 1    |      |
| —14          | 980A0012H35 | O-ring ■                                      | 2    |      |
| —15          | 980A0012H49 | O-ring ■                                      | 1    |      |
| —16          | 980A0012K09 | O-ring ■                                      | 1    |      |
| —17          | 534B0038H01 | Spring, Unloader, TDSH 193S                   | 1    |      |
|              | 534B0020H01 | Spring, Unloader, TDSH 193L                   | 1    |      |
| —18          | 534B0015H01 | Ring, Retaining ■                             | 2    |      |
| —19          | 534B0910H01 | Locknut ■                                     | 1    |      |
| —20          | 534A0035H02 | Locknut                                       | 1    |      |
| —21          | 534B0125H02 | Lockwasher ■                                  | 1    |      |
| —22          | 944A0008H03 | Plug, Pipe                                    | 7    |      |
| —23          | 534B0125H01 | Lockwasher ■                                  | 1    |      |
| —24          | 534D0949C01 | Cylinder, TDSH 193S                           | 1    |      |
|              | 534D1015C01 | Cylinder, TDSH 193L                           | 1    |      |
| —25          | 534C1051H01 | Spindle, TDSH 193S                            | 1    |      |
|              | 534C1024H01 | Spindle, TDSH 193L                            | 1    |      |
| —26          | 534C1142G01 | Assembly, Shaft                               | 1    |      |
| —27          | 534D1013C01 | Housing, Bearing                              | 1    |      |
| —28          | 534D1012H01 | Cover, Cylinder                               | 1    |      |
| —29          | 534A0518H01 | Washer, Spring                                | 2    |      |
| —30          | 534B0567H01 | Spacer  | 1    |      |
| —31          | 534A0519H01 | Locknut                                       | 1    |      |
| —32          | 534A0520H01 | Lockwasher ■                                  | 1    |      |
| —33          | 534C1170H04 | Bearing, Ball                                 | 2    |      |
| —34          | 534B0506H01 | Nut, Spindle                                  | 1    |      |
| —35          | 534A0541H01 | Capscrew, Socket Head                         | 8    |      |
| —36          | 333Q0000800 | O-ring ■                                      | 2    |      |
| —37          | 980A0012B86 | O-ring ■                                      | 1    |      |
| —38          | 980A0012B91 | O-ring ■                                      | 1    |      |
|              |             | Not Shown:                                    |      |      |
| —39          | 581B0001H06 | Wheel, Hand                                   | 1    |      |
| —40          | 581A0011H03 | Washer, Spring                                | 1    |      |
| —41          | 901A0045D01 | Bolt, Hex Head, 1/2-13 UNC x 3/4"             | 1    |      |

■ Item included in O-ring and Gasket Kit. See page 15.

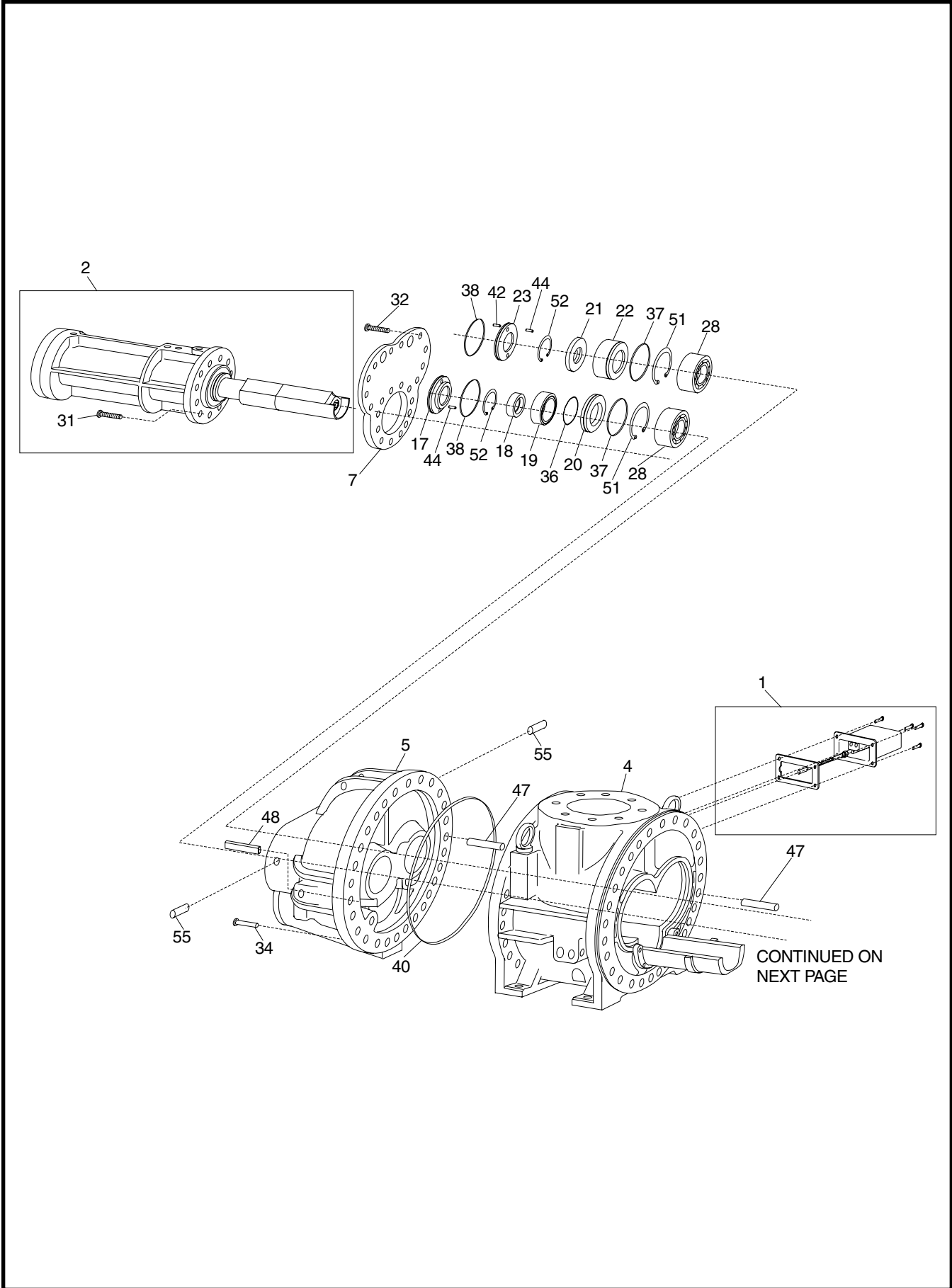


Figure 7a. Screw Compressor, 233.

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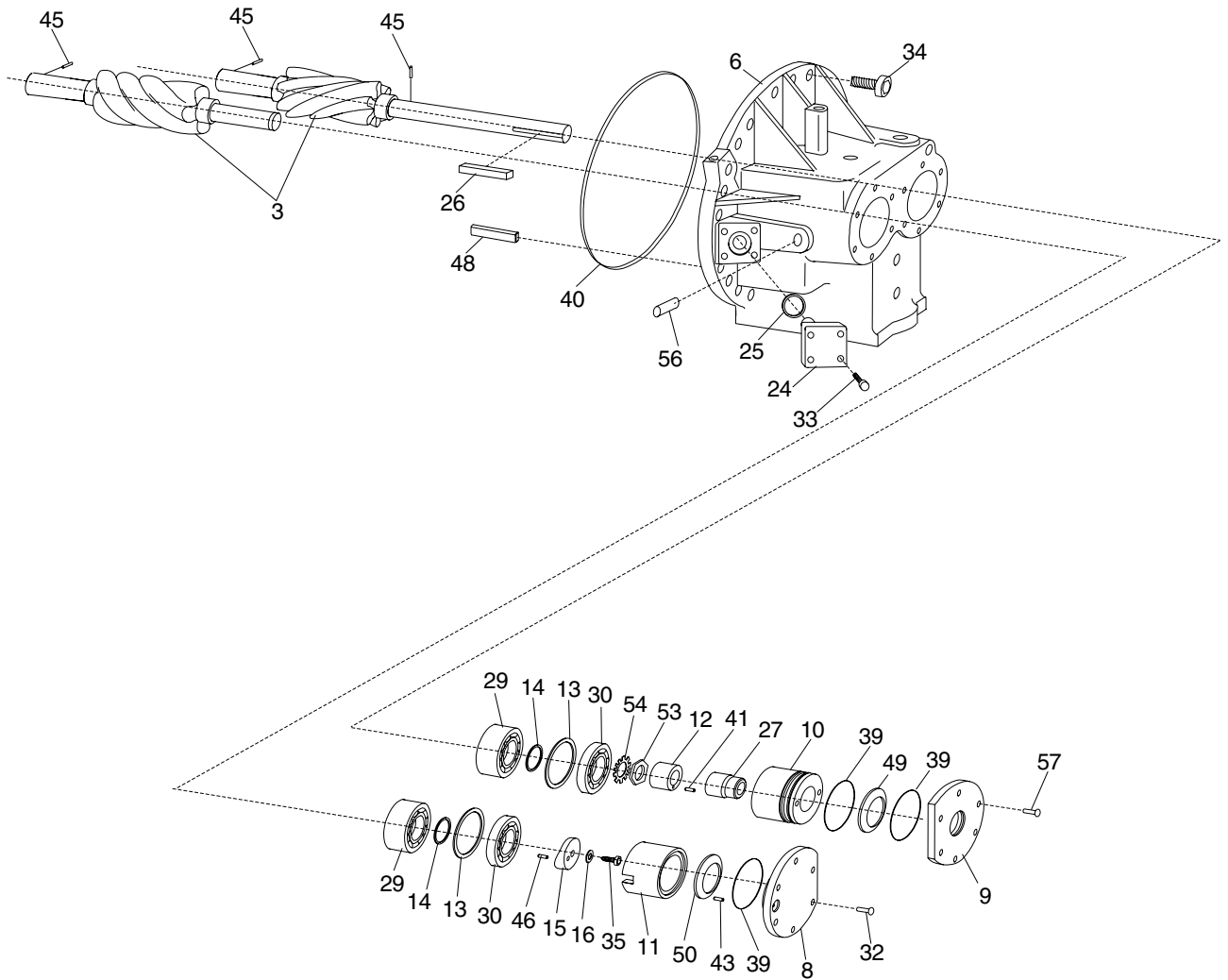


Figure 7b. Screw Compressor, 233.

| FIG. & INDEX | ITEM NUMBER | DESCRIPTION                                       | QTY. | REV. |
|--------------|-------------|---|------|------|
| 7—           | 534E0170G01 | TDSH 233S, Screw Compressor, New                  | Ref. | AF   |
|              | 534E0170G02 | TDSH 233L, Screw Compressor, New                  | Ref. | AF   |
|              | 534E0170G05 | TDSH 233XL, Screw Compressor, New                 | Ref. | AF   |
|              | 534E0170S01 | TDSH 233S, Screw Compressor, Rebuilt              | Ref. |      |
|              | 534E0170S02 | TDSH 233L, Screw Compressor, Rebuilt              | Ref. |      |
|              | 534E0170S05 | TDSH 233XL, Screw Compressor, Rebuilt             | Ref. |      |
|              | 534E0488G01 | TDSH 233S, Screw Compressor, Handwheel, New       | Ref. | S    |
|              | 534E0488G02 | TDSH 233L, Screw Compressor, Handwheel, New       | Ref. | S    |
|              | 534E0488G03 | TDSH 233XL, Screw Compressor, Handwheel, New      | Ref. | S    |
| —1           | —           | Slide Stop Indication Assembly (See Figure 17)    | Ref. |      |
| —2           | —           | Slide Valve/Stop Assembly (See Figure 8 & 9)      | Ref. |      |
| —3           | 534A0087G02 | Rotor Pair, TDSH 233L                             | 1    |      |
|              | 534A0499G02 | Rotor Pair, TDSH 233XL                            | 1    |      |
| —4           | 534D0130G01 | Assembly, Casing, Rotor, TDSH 233S                | 1    |      |
|              | 534C0194H21 | Plug, Pipe, 1/2-14 NPTF w/.328" Orifice           | 1    |      |
|              | 534D0130G02 | Assembly, Casing, Rotor, TDSH 233L                | 1    |      |
|              | 534C0194H22 | Plug, Pipe, 1/2-14 NPTF w/.386" Orifice           | 1    |      |
|              | 534D0130G03 | Assembly, Casing, Rotor, TDSH 233XL               | 1    |      |
|              | 534C0194H32 | Plug, Pipe, 3/4-14 NPTF w/.469" Orifice           | 1    |      |
| —5           | 534E0019C01 | Casing, Inlet                                     | 1    |      |
| —6           | 534E0438C01 | Casing, Discharge                                 | 1    |      |
| —7           | 534D0192C01 | Cover, Inlet                                      | 1    |      |
| —8           | 534C0113C01 | Cover, Outlet                                     | 1    |      |
| —9           | 534D0129C01 | Housing, Seal                                     | 1    |      |
| —10          | 534D0127C01 | Spacer, Seal Housing                              | 1    |      |
| —11          | 534D0495C01 | Sleeve, Distance                                  | 1    |      |
| —12          | 534B0075H01 | Ring, Seal Distance                               | 1    |      |
| —13          | 534C0251H01 | Plate, Bearing Backup ▲◆                          | 2    |      |
| —14          | 534C0252H01 | Washer, Adjusting ▲◆                              | 2    |      |
| —15          | 534C0171H01 | Plate, Bearing                                    | 1    |      |
| —16          | 534B0103H01 | Washer  | 1    |      |
| —17          | 534D0089C01 | Cover, Female Inlet Bore, original <sup>(3)</sup> | 1    |      |
|              | 534D1043C01 | Cover, Female Inlet Bore, current <sup>(3)</sup>  | 1    |      |
| —18          | 534C0234H01 | Piston, Female Balance <sup>(3)</sup> ★           | 1    |      |
| —19          | 534C0212C01 | Sleeve, Female Balance Piston <sup>(3)</sup> ★    | 1    |      |
| —20          | 534C0235H01 | Ring, Female <sup>(3)</sup> ★                     | 1    |      |
| —21          | 534C0249H01 | Piston, Male Balance ★                            | 1    |      |
| —22          | 534C0250C01 | Sleeve, Male Balance Piston ★                     | 1    |      |
| —23          | 534D0193C01 | Cover, Male Inlet Bore                            | 1    |      |
| —24          | 534B0051C01 | Plug, Vapor Injection                             | 1    |      |
| —25          | 959A0057H05 | Gasket, Flange ■                                  | 1    |      |
| —26          | 534A0662H03 | Key, Square                                       | 1    |      |
| —27          | 534C0701H03 | Assembly, Seal, Shaft ●                           | 1    |      |
| —28          | 534B0004H04 | Bearing, Roller ▲                                 | 2    |      |
| —29          | 534B0004H11 | Bearing, Roller ▲                                 | 2    |      |
| —30          | 534B0101H22 | Bearing, Ball, Four-Point Contact ▲◆              | 2    |      |
| —31          | 111Q0740738 | Capscrew, Socket Head, M12 x 90mm                 | 8    |      |
| —32          | 111Q0740739 | Capscrew, Socket Head, M12 x 45mm                 | 20   |      |
| —33          | 111Q0740737 | Capscrew, Socket Head, M16 x 50mm                 | 4    |      |
| —34          | 111Q0740720 | Capscrew, Socket Head, M16 x 60mm                 | 48   |      |
|              | 111Q0740742 | Capscrew, Socket Head, M16 x 80mm                 | 8    |      |
| —35          | 534A0076H02 | Capscrew, Socket Head, 3/4-10 UNC x 2-1/2" ▲◆     | 1    |      |

| FIG. & INDEX  | ITEM NUMBER | DESCRIPTION  | QTY. | REV. |
|---|-------------|--|------|------|
| —36   | 980A0012B79 | O-ring ■ ★   | 1    |      |
| —37   | 980A0012B88 | O-ring ■ ★   | 2    |      |
| —38   | 980A0012B89 | O-ring ■ ★   | 2    |      |
| —39   | 980A0012B90 | O-ring ■ ● ◆   | 3    |      |
| —40   | 980A0012K49 | O-ring ■ ■   | 2    |      |
| —41   | 534A0038H08 | Pin, Spring, .250 x .625" ●                            | 1    |      |
| —42   | 534A0038H02 | Pin, Spring, .187 x .625" ★                            | 1    |      |
| —43   | 534A0038H05 | Pin, Spring, .125 x 500" ▲ ◆                           | 1    |      |
| —44   | 534A0037H02 | Pin, Dowel, 5m6 x 12mm <sup>(3)</sup> ★                | 2/3  |      |
| —45   | 534A0037H12 | Pin, Dowel, 5h8 x 10mm <sup>(3)</sup> ● ★              | 2/3  |      |
| —46   | 534A0037H15 | Pin, Dowel, 10h8 x 45mm ▲ ◆                            | 1    |      |
| —47   | 534B0149H01 | Pin, Dowel, 20 x 70mm                                  | 2    |      |
| —48   | 534B0151H01 | Pin, Dowel, 20 x 70mm, Special                         | 2    |      |
| —49   | 534B0102H06 | Washer, Spring   | 1    |      |
| —50   | 534B0102H07 | Washer, Spring   | 1    |      |
| —51   | 534B0014H05 | Ring, Retaining, Metric 472-160                        | 2    |      |
| —52   | 534B0014H12 | Ring, Retaining, Metric 471-60 ★                       | 2    |      |
| —53   | 534A0035H05 | Locknut  | 1    |      |
| —54   | 534B0125H10 | Lockwasher ■ ▲ ◆                                       | 1    |      |
| —55   | 944A0008H03 | Plug, Pipe, 3/8-18 NPTF, Hollow Hex                    | 6    |      |
| —56   | 944A0008H05 | Plug, Pipe, 3/4-14 NPTF, Hollow Hex                    | 10   |      |
| —57   | 111Q0740723 | Capscrew, Socket Head, M12 x 55mm                      | 6    |      |
|   |             | Recommended Spare Parts/Service Replacement Parts Kits |      |      |
|   | 534M0556G03 | ▲ Complete Bearing Kit                                 | 1    |      |
|   | 111Q0042684 | ◆ Thrust Bearing Kit <sup>(1)</sup>                    | 1    |      |
|   | 535M0057G01 | ■ O-ring and Gasket Kit <sup>(2)</sup>                 | 1    |      |
|   | 534M0163G03 | ● Shaft Seal Kit                                       | 1    |      |
|   | 534M0557G03 | ★ Balance Piston Kit                                   | 1    |      |
|   | 534A0124G01 | Compressor Tool Kit (For Disassembly/Assembly)         | 1    |      |
| <p>(1) Thrust Bearing Kit items are included in Complete Bearing Kit.</p> <p>(2) O-ring and Gasket set also contains appropriate suction and discharge gaskets. O-ring Kit only: 534B0782H01.</p> <p>(3) <i>Female balance piston, -sleeve and -ring</i> are deleted beginning with s.n. 2312E, 0134EE, 1985F, 0160FF, 0058FL, 0003SFL and 0046T. Exceptions are 2308E—2311E, 1981F—1984F, 0159FF, 0050FL—0057FL, 0001SFL and 0002SFL. <i>Female inlet bore cover</i> changed at the same time.</p> <p>Balance Piston Kit will continue to include these items (except cover) for universal field service. O-ring Kits are unaffected. Factory recommends you maintain unit with <i>Female Balance Piston</i> and related parts intact.</p> |             |  |      |      |

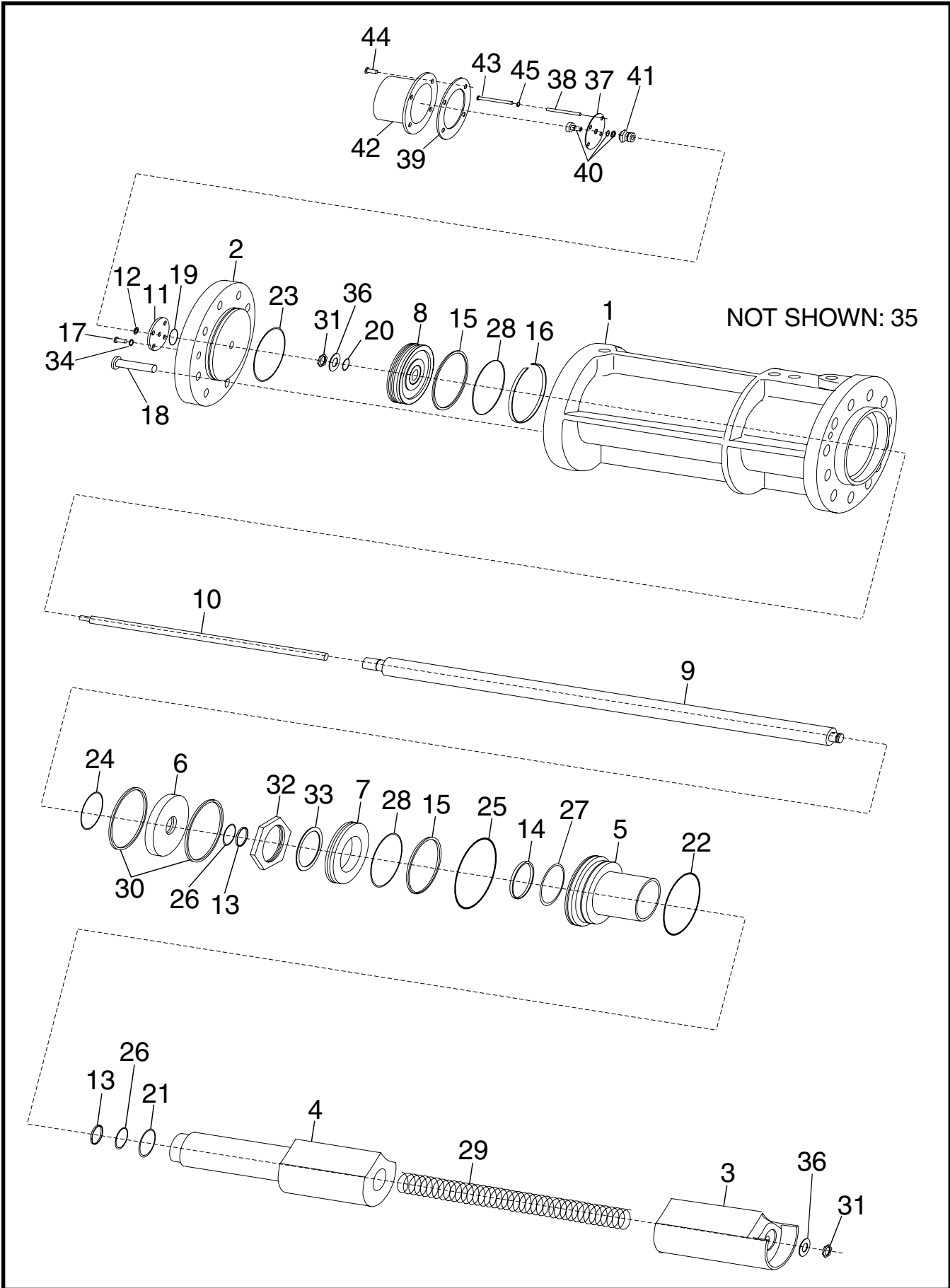


Figure 8. Slide Valve/Stop, 233.



| FIG. & INDEX | ITEM NUMBER | DESCRIPTION   | QTY. | REV. |
|--------------|-------------|---|------|------|
| 8—           | 534E0170    | TDSH 233 Slide Valve/Stop Assembly                                | Ref. | AF   |
| —1           | 534D0079C01 | Cylinder, TDSH 233S/L   | 1    |      |
|              | 534E0459C01 | Cylinder, TDSH 233XL  | 1    |      |
| —2           | 534D0096C01 | Cover, Cylinder   | 1    |      |
| —3           | 534D0082C01 | Valve, Slide, TDSH 233S   | 1    |      |
|              | 534D0083C01 | Valve, Slide, TDSH 233L   | 1    |      |
|              | 534E0456C01 | Valve, Slide, TDSH 233XL  | 1    |      |
| —4           | 534D0085C01 | Stop, Slide, TDSH 233S  | 1    |      |
|              | 534D0084C01 | Stop, Slide, TDSH 233L  | 1    |      |
|              | 534E0460C01 | Stop, Slide, TDSH 233XL   | 1    |      |
| —5           | 534D0088C01 | Cover, Slide Stop, TDSH 233S/L                                    | 1    |      |
|              | 534D0088C02 | Cover, Slide Stop, TDSH 233XL                                     | 1    |      |
| —6           | 534C0119C01 | Cover, Internal Cylinder  | 1    |      |
| —7           | 534C0118C01 | Piston, Slide Stop  | 1    |      |
| —8           | 534C0117C01 | Piston, Spindle   | 1    |      |
| —9           | 534D0464G05 | Assembly, Spindle, TDSH 233S                                      | 1    |      |
|              | 534D0464G06 | Assembly, Spindle, TDSH 233L                                      | 1    |      |
|              | 534D0464G11 | Assembly, Spindle, TDSH 233XL                                     | 1    |      |
| —10          | 534C0123H01 | Shaft, Potentiometer, TDSH 233S                                   | 1    |      |
|              | 534C0123H02 | Shaft, Potentiometer, TDSH 233L                                   | 1    |      |
|              | 534C0123H03 | Shaft, Potentiometer, TDSH 233XL                                  | 1    |      |
| —11          | 534B0112H01 | Plate, Backing  | 1    |      |
| —12          | 534B0182H01 | Collar, Clamp   | 1    |      |
| —13          | 534B0006H04 | Seal, Rod ■   | 2    |      |
| —14          | 534B0006H05 | Seal, Rod ■   | 1    |      |
| —15          | 534C0187H03 | Glyd Ring ■   | 2    |      |
| —16          | 534B0079H01 | Slyd Ring ■   | 1    |      |
| —17          | 111Q0740768 | Capscrew, Socket Head, M5 x 16mm                                  | 4    |      |
| —18          | 111Q0740738 | Capscrew, Socket Head, M12 x 55mm                                 | 8    |      |
| —19          | 980A0014A61 | O-ring ■  | 1    |      |
| —20          | 980A0012A71 | O-ring ■  | 1    |      |
| —21          | 980A0012B02 | O-ring ■  | 1    |      |
| —22          | 980A0012B86 | O-ring ■  | 1    |      |
| —23          | 980A0012B92 | O-ring ■  | 1    |      |
| —24          | 980A0012B93 | O-ring ■  | 1    |      |
| —25          | 980A0012B97 | O-ring ■  | 1    |      |
| —26          | 980A0012H36 | O-ring ■  | 2    |      |
| —27          | 980A0012H51 | O-ring ■  | 1    |      |
| —28          | 980A0012H70 | O-ring ■  | 2    |      |
| —29          | 534C1360H03 | Spring, Unloader, TDSH 233S                                       | 1    |      |
|              | 534C1360H04 | Spring, Unloader, TDSH 233L/XL                                    | 1    |      |
| —30          | 534B0014H14 | Ring, Retaining, Metric 472-180 ■                                 | 2    |      |
| —31          | 534B0910H02 | Locknut ■   | 2    |      |
| —32          | 534A0035H07 | Locknut   | 1    |      |
| —33          | 534B0125H07 | Lockwasher ■  | 1    |      |
| —34          | 111Q0940141 | Lockwasher, 5mm   | 4    |      |
| —35          | 944A0008H03 | Plug, Pipe, 3/8-18NPTF, Hollow Hex                                | 8    |      |
| —36          | 534B0125H06 | Lockwasher ■  | 2    |      |
| —37          | 534D0523G01 | Slide Valve Indication Mechanism Ref.                             |      |      |
|              | 534B0294H01 | Plate, Mounting*  | 1    |      |
| —38          | 534A0263H01 | Support, Tubing*  | 4    |      |
| —39          | 534A0046H01 | Gasket* ■   | 1    |      |
| —40          | 534B0501H01 | Potentiometer*  | 1    |      |
| —41          | 111Q0451313 | Coupling, Flexible*   | 1    |      |
| —42          | 534B0062C01 | Box, Cover  | 1    |      |
| —43          | 111Q0740729 | Capscrew, Socket Head, M5 x 60mm                                  | 4    |      |
| —44          | 111Q0740728 | Capscrew, Socket Head, M6 x 16mm                                  | 4    |      |
| —45          | 111Q0940141 | Lockwasher, 5mm   | 4    |      |
| *            | 534D0523G02 | Slide Valve Potentiometer Kit (also replaces Maury potentiometer) | 1    |      |

■ Item included in O-ring and Gasket Kit. See page 23.

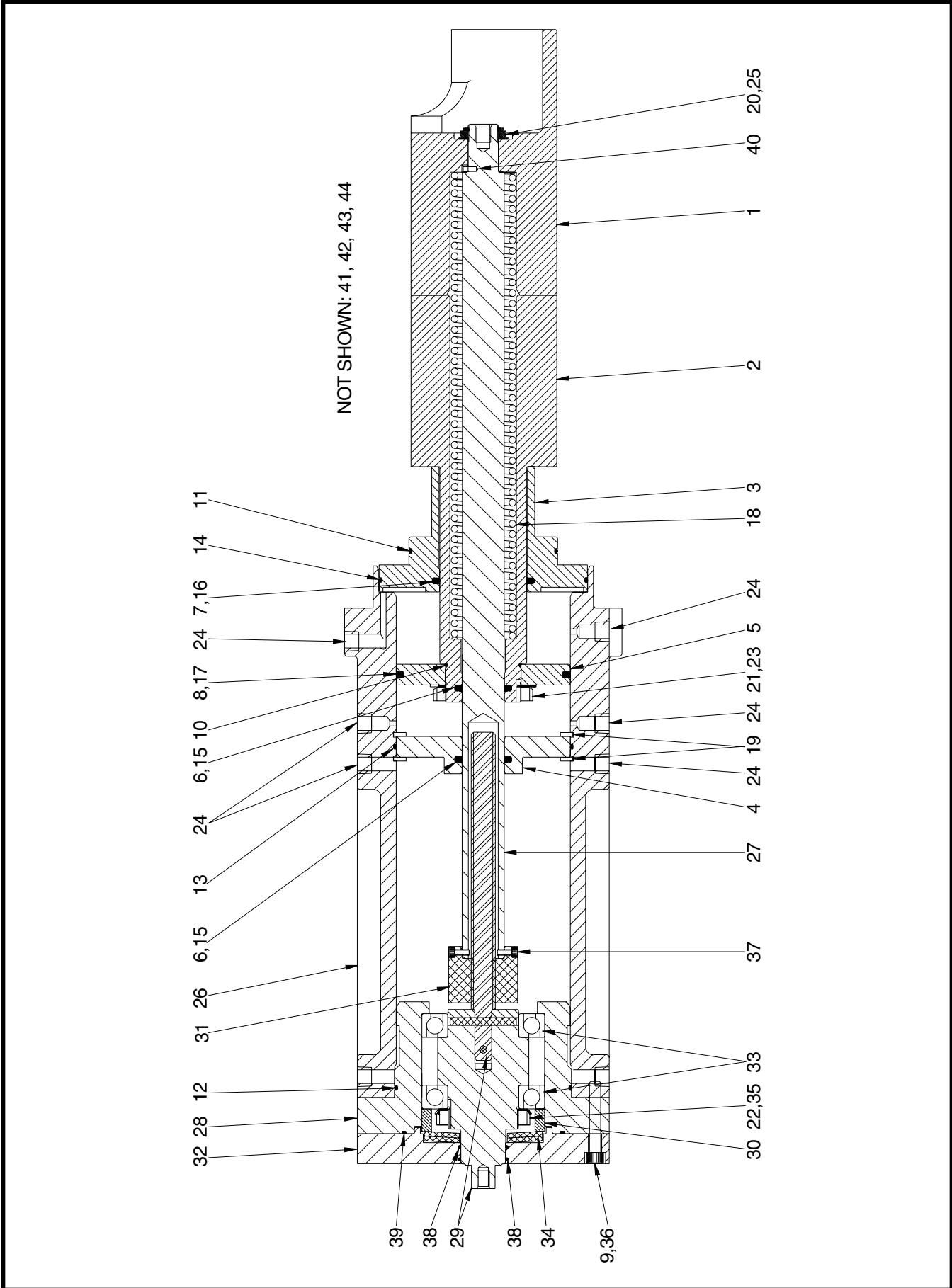


Figure 9. Slide Valve/Stop, Handwheel, 233.

| FIG. & INDEX | ITEM NUMBER | DESCRIPTION                                   | QTY. | REV. |
|--------------|-------------|---|------|------|
| 9—           | 534E0488    | TDSH 233 Slide Valve/Stop Assembly, Handwheel | Ref. | R    |
| —1           | 534D0082C01 | Valve, Slide, TDSH 233S                       | 1    |      |
|              | 534D0083C01 | Valve, Slide, TDSH 233L                       | 1    |      |
|              | 534E0456C01 | Valve, Slide, TDSH 233XL                      | 1    |      |
| —2           | 534D0085C01 | Valve, Stop, TDSH 233S                        | 1    |      |
|              | 534D0084C01 | Valve, Stop, TDSH 233L                        | 1    |      |
|              | 534E0460C01 | Valve, Stop, TDSH 233XL                       | 1    |      |
| —3           | 534D0088C02 | Cover, Slide Stop, TDSH 233S/L                | 1    |      |
|              | 534D0088C01 | Cover, Slide Stop, TDSH 233XL                 | 1    |      |
| —4           | 534C0119C01 | Cover, Internal Cylinder                      | 1    |      |
| —5           | 534C0118C01 | Piston, Slide Stop                            | 1    |      |
| —6           | 534B0006H04 | Seal, Rod ■                                   | 2    |      |
| —7           | 534B0006H05 | Seal, Rod ■                                   | 1    |      |
| —8           | 534C0187H03 | Ring, Glyd ■                                  | 1    |      |
| —9           | 111Q0740739 | Capscrew, M12 x 45mm*                         | 2    |      |
| —10          | 980A0012B02 | O-ring ■                                      | 1    |      |
| —11          | 980A0012B86 | O-ring ■                                      | 1    |      |
| —12          | 980A0012B92 | O-ring ■                                      | 1    |      |
| —13          | 980A0012B93 | O-ring ■                                      | 1    |      |
| —14          | 980A0012B97 | O-ring ■                                      | 1    |      |
| —15          | 980A0012H36 | O-ring ■                                      | 2    |      |
| —16          | 980A0012H51 | O-ring ■                                      | 1    |      |
| —17          | 980A0012H70 | O-ring ■                                      | 1    |      |
| —18          | 534B0080H01 | Spring, Unloader, TDSH 233S                   | 1    |      |
|              | 534B0081H01 | Spring, Unloader, TDSH 233L/XL                | 1    |      |
| —19          | 534B0014H14 | Ring, Retaining ■                             | 2    |      |
| —20          | 534B0910H02 | Locknut ■                                     | 1    |      |
| —21          | 534A0035H07 | Locknut                                       | 1    |      |
| —22          | 534A0035H05 | Locknut                                       | 2    |      |
| —23          | 534B0125H07 | Lockwasher ■                                  | 1    |      |
| —24          | 944A0008H03 | Plug, Pipe, 3/8—18 NPTF                       | 7    |      |
| —25          | 534B0125H06 | Lockwasher ■                                  | 1    |      |
| —26          | 534D0976C01 | Cylinder, TDSH 233S                           | 1    |      |
|              | 534D1018C01 | Cylinder, TDSH 233L                           | 1    |      |
|              | 534E0572C01 | Cylinder, TDSH 233XL                          | 1    |      |
| —27          | 534C1033H01 | Spindle, TDSH 233S                            | 1    |      |
|              | 534C1030H01 | Spindle, TDSH 233L                            | 1    |      |
|              | 534C1155H01 | Spindle, TDSH 233XL                           | 1    |      |
| —28          | 534D1016C01 | Bearing Housing                               | 1    |      |
| —29          | 534C1038G01 | Assembly, Shaft                               | 1    |      |
| —30          | 534B0496H01 | Spacer  | 1    |      |
| —31          | 534C1037H01 | Nut   | 1    |      |
| —32          | 534D1017H01 | Face Plate                                    | 1    |      |
| —33          | 534C1170H03 | Bearing, Ball                                 | 2    |      |
| —34          | 534A0533H01 | Washer, Spring                                | 2    |      |
| —35          | 534B0125H10 | Lockwasher ■                                  | 1    |      |
| —36          | 333Q0000802 | Capscrew, Socket Head, M12 x 75mm             | 8    |      |
| —37          | 534A0541H01 | Capscrew, Socket Head, M6 x 16                | 8    |      |
| —38          | 333Q0000800 | O-ring ■                                      | 2    |      |
| —39          | 980A0012B90 | O-ring ■                                      | 1    |      |
| —40          | 534A0037H02 | Pin, Spindle                                  | 1    |      |
|              |             | Not Shown:                                    |      |      |
| —41          | 581B0001H06 | Wheel, Hand                                   | 1    |      |
| —42          | 581A0011H03 | Washer, Spring                                | 1    |      |
| —43          | 901A0045D01 | Bolt, Hex Head, 1/2-13 UNC x 3/4"             | 1    |      |
| —44          | 111Q0940051 | Washer, Flat                                  | 1    |      |

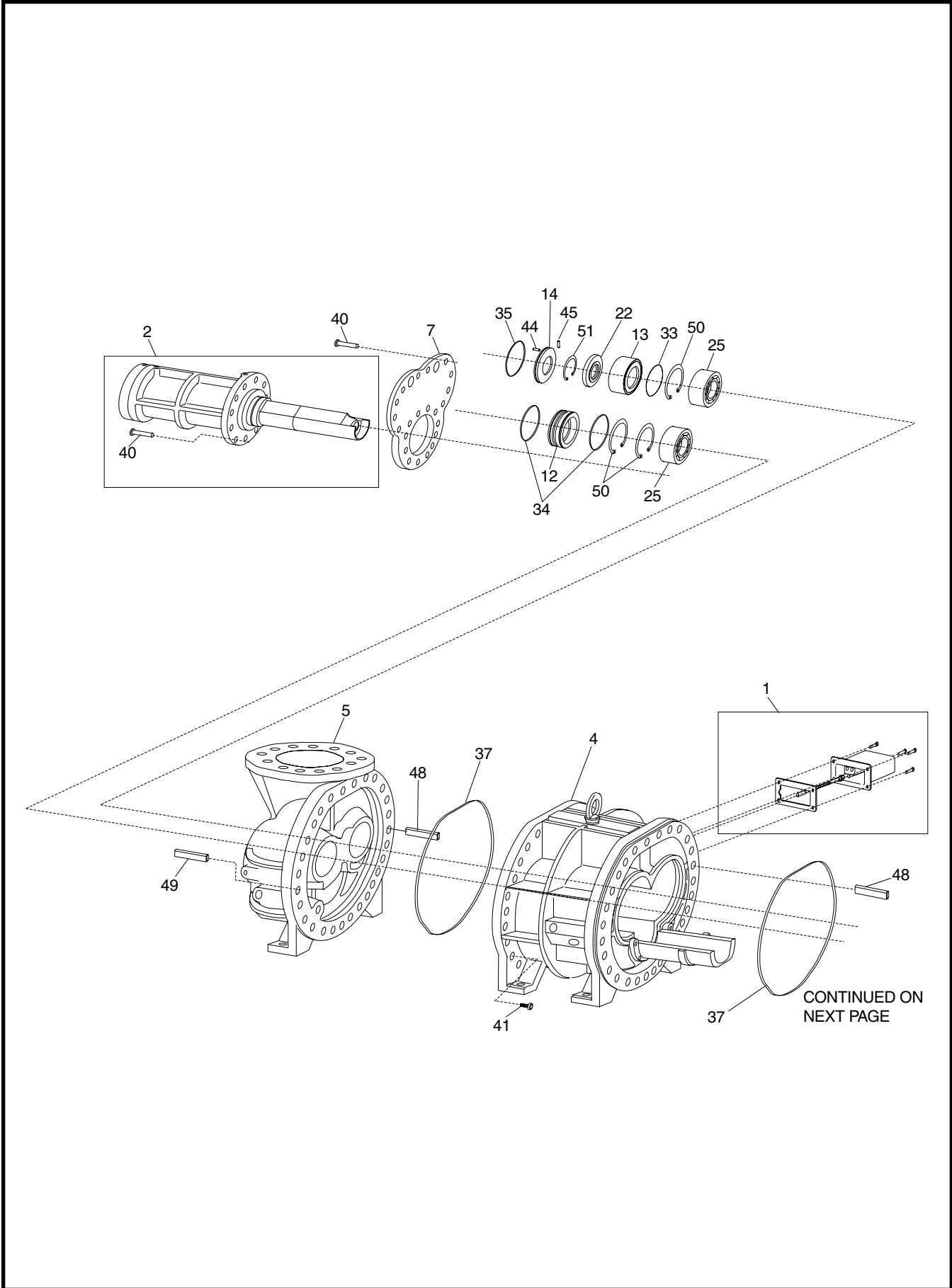


Figure 10a. Screw Compressor, 283.

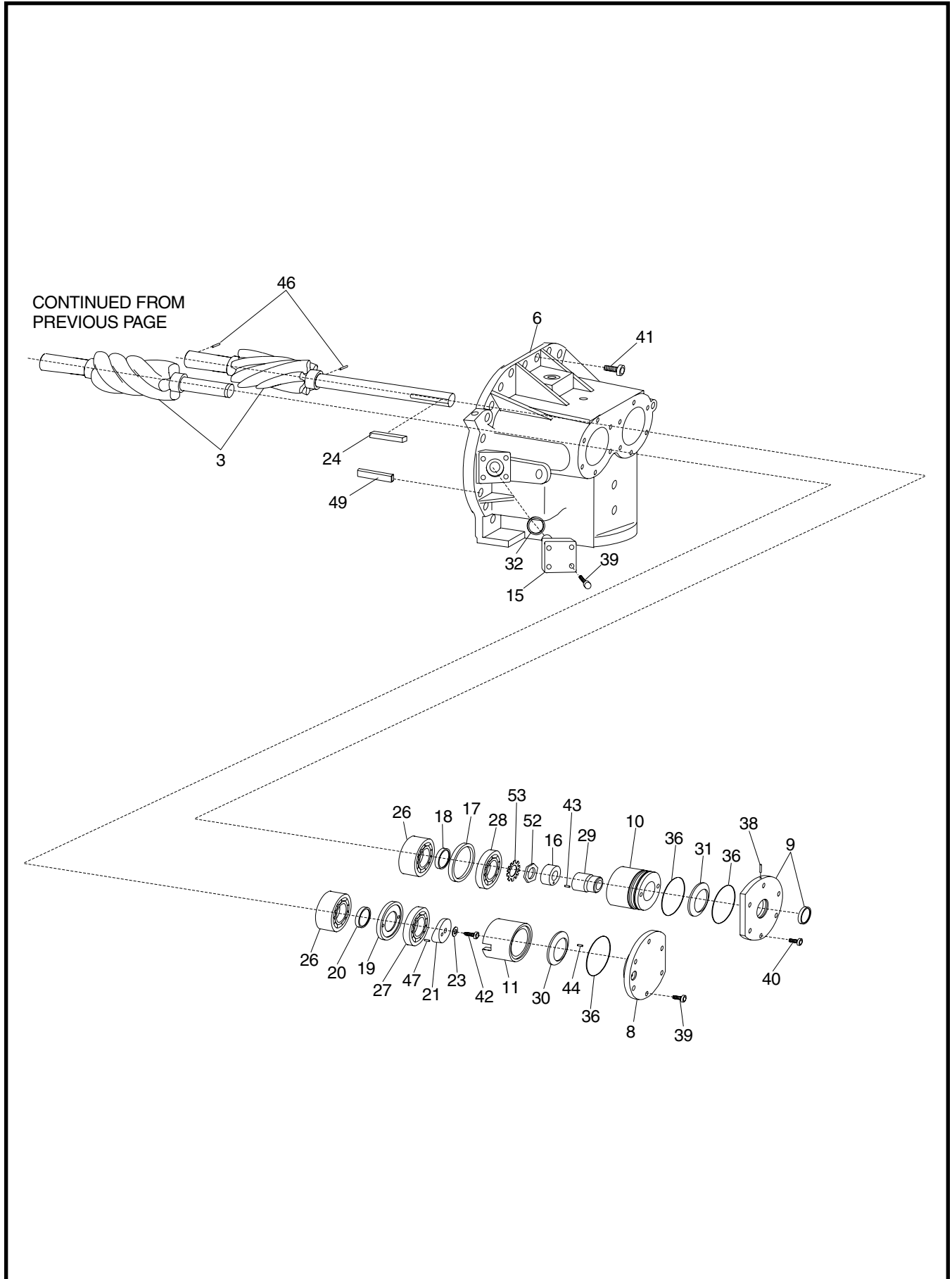


Figure 10b. Screw Compressor, 283.

| FIG. & INDEX | ITEM NUMBER | DESCRIPTION                                    | QTY. | REV. |
|--------------|-------------|--|------|------|
| 10—          | 534D0575G01 | TDSH 283S, Screw Compressor, New               | Ref. | P    |
|              | 534D0575G02 | TDSH 283L, Screw Compressor, New               | Ref. | P    |
|              | 534E0604G01 | TDSH 283XL, Screw Compressor, New              | Ref. | J    |
|              | 534D0575S01 | TDSH 283S, Screw Compressor, Rebuilt           | Ref. |      |
|              | 534D0575S02 | TDSH 283L, Screw Compressor, Rebuilt           | Ref. |      |
|              | 534D0885G01 | TDSH 283S, Screw Compressor, Handwheel, New    | Ref. | P    |
|              | 534D0885G02 | TDSH 283L, Screw Compressor, Handwheel, New    | Ref. | P    |
| —1           | —           | Slide Stop Indication Assembly (See Figure 17) | Ref. |      |
| —2           | —           | Slide Valve/Stop Assembly (See Figure 11 & 12) | Ref. |      |
| —3           | 534A0324G02 | Rotor Pair, TDSH 283S <sup>(2)</sup>           | 1    |      |
|              | 534A0088G01 | Rotor Pair, TDSH 283S <sup>(3)</sup>           | 1    |      |
|              | 534A0259G02 | Rotor Pair, TDSH 283L <sup>(2)</sup>           | 1    |      |
|              | 534A0089G01 | Rotor Pair, TDSH 283L <sup>(3)</sup>           | 1    |      |
|              | 534A0644G02 | Rotor Pair, TDSH 283SX <sup>(2)</sup>          | 1    |      |
|              | 534A0331G02 | Rotor Pair, TDSL 283XL                         | 1    |      |
| —4           | 534C0208G01 | Assembly, Casing, Rotor, TDSH 283S             | 1    |      |
|              | 534C0194H31 | Plug, Pipe, 3/4-14 NPTF w/.397" Orifice        | 1    |      |
|              | 534C0207G01 | Assembly, Casing, Rotor, TDSH 283L             | 1    |      |
|              | 534C0194H32 | Plug, Pipe, 3/4-14 NPTF w/.453" Orifice        | 1    |      |
|              | 534C1204G01 | Assembly, Casing, Rotor, TDSH 283SX            | 1    |      |
|              | 534C0194H53 | Plug, Pipe, 3/4-14 NPTF w/.500" Orifice        | 1    |      |
| —5           | 534E0271C02 | Casing, Inlet, TDSH 283S/L <sup>(2)</sup>      | 1    |      |
|              | 534E0049C01 | Casing, Inlet, TDSH 283S/L <sup>(3)</sup>      | 1    |      |
|              | 534E0271C01 | Casing, Inlet, TDSH 283XL                      | 1    |      |
| —6           | 534E0439C01 | Casing, Discharge                              | 1    |      |
| —7           | 534D0499C01 | Cover, Inlet <sup>(2)</sup>                    | 1    |      |
|              | 534D0145C01 | Cover, Inlet <sup>(3)</sup>                    | 1    |      |
| —8           | 534D0161C01 | Cover, Outlet                                  | 1    |      |
| —9           | 534D0151C01 | Housing, Seal                                  | 1    |      |
|              | 333Q0001219 | Seal, Oil (Oil Seal Tool 534A0636H01)          | 1    |      |
| —10          | 534D0150C01 | Spacer, Seal Housing                           | 1    |      |
| —11          | 534D0170C01 | Sleeve, Distance                               | 1    |      |
| —12          | 534D0168C01 | Cover, Female Inlet Bore                       | 1    |      |
| —13          | 534D0509C01 | Sleeve, Male Balance Piston ★                  | 1    |      |
|              | 534D0226C01 | Sleeve, Male Balance Piston ◆                  | 1    |      |
| —14          | 534D0507C01 | Cover, Male Inlet Bore                         | 1    |      |
| —15          | 534C0204C01 | Plug, Vapor Injection                          | 1    |      |
| —16          | 534C0193H01 | Ring, Seal Distance                            | 1    |      |
| —17          | 534C0645H01 | Plate, Male Bearing Backup ▲ ◆                 | 1    |      |
|              | 534C0190H01 | Plate, M/F Bearing Backup ♣                    | 1    |      |
| —18          | 534C0646H01 | Washer, Male Adjusting ▲ ◆                     | 1    |      |
|              | 534C0191H01 | Washer, M/F Adjusting ♣                        | 1    |      |
| —19          | 534C0190H01 | Plate, M/F Bearing Backup ▲ ◆ ♣                | 1    |      |
| —20          | 534C0191H01 | Washer, M/F Adjusting ▲ ◆ ♣                    | 1    |      |
| —21          | 534C0200H01 | Plate, Bearing                                 | 1    |      |
| —22          | 534D0514H01 | Piston, Male Balance ★                         | 1    |      |
|              | 534C0279H01 | Piston, Male Balance ◆                         | 1    |      |
| —23          | 534B0103H01 | Washer   | 1    |      |
| —24          | 534A0662H04 | Key, Square                                    | 1    |      |
| —25          | 534B0004H11 | Bearing, Cylindrical Roller ▲                  | 2    |      |
| —26          | 534B0004H12 | Bearing, Cylindrical Roller ▲                  | 2    |      |

| FIG. & INDEX   | ITEM NUMBER | DESCRIPTION  | QTY. | REV. |
|--|-------------|--|------|------|
| —27  | 534B0101H21 | Bearing, Ball, Four Point Angular Contact ▲ ◆ ❖    | 1    |      |
| —28  | 534B0101H26 | Bearing, Ball, Four Point Angular Contact ▲ ◆      | 1    |      |
|  | 534B0101H21 | Bearing, Ball, Four Point Angular Contact ❖        | 1    |      |
| —29  | 534C0701H04 | Assembly, Shaft Seal ●                             | 1    |      |
| —30  | 534B0102H06 | Washer, Spring                                     | 1    |      |
| —31  | 534B0102H08 | Washer, Spring                                     | 1    |      |
| —32  | 959A0057H07 | Gasket, Flange ■                                   | 1    |      |
| —33  | 980A0012B19 | O-ring ■ ★   | 1    |      |
| —34  | 980A0012B89 | O-ring ■ ★ ●                                       | 2    |      |
| —35  | 980A0012B93 | O-ring ■ ★   | 1    |      |
| —36  | 980A0012B96 | O-ring ■ ● ◆                                       | 3    |      |
| —37  | 980A0012K52 | O-ring ■   | 2    |      |
| —38  | 111Q0740253 | Setscrew, Socket Head, 1/4-20 UNC x 1/2"           | 1    |      |
| —39  | 111Q0740743 | Capscrew, Socket Head, M16 x 55mm                  | 11   |      |
| —40  | 111Q0740744 | Capscrew, Socket Head, M16 x 65mm                  | 27   |      |
|  | 111Q0740774 | Capscrew, Socket Head, M16 x 120mm                 | 8    |      |
| —41  | 111Q0740772 | Capscrew, Socket Head, M20 x 75                    | 45   |      |
| —42  | 534A0076H02 | Capscrew, Socket Head, 3/4-10 UNC x 2-1/2" ▲ ◆     | 1    |      |
| —43  | 534A0038H08 | Pin, Spring, .250 x .625" ●                        | 1    |      |
| —44  | 534A0038H10 | Pin, Spring, .312 x 1.00" ▲ ◆ ★ ●                  | 2    |      |
| —45  | 534A0037H03 | Pin, Dowel, 5m6 x 16mm ★ ●                         | 1    |      |
| —46  | 534A0037H12 | Pin, Dowel, 5h8 x 10mm ● ★ ●                       | 2    |      |
| —47  | 534A0037H15 | Pin, Dowel, 10h8 x 45mm ▲ ◆                        | 1    |      |
| —48  | 534B0149H01 | Pin, Dowel, 20 x 70mm                              | 2    |      |
| —49  | 534B0151H01 | Pin, Dowel, 20 x 70mm, Special                     | 2    |      |
| —50  | 534B0014H13 | Ring, Retaining ▲ ★                                | 3    |      |
| —51  | 534B0014H12 | Ring, Retaining ★ ●                                | 1    |      |
| —52  | 534A0035H14 | Locknut, current <sup>(2)(4)</sup>                 | 1    |      |
|  | 534A0035H09 | Locknut, original <sup>(3)</sup>                   | 1    |      |
| —53  | 534B0125H15 | Lockwasher, current <sup>(2)</sup> ▲ ◆             | 1    |      |
|  | 534B0125H09 | Lockwasher, original <sup>(3)</sup>                | 1    |      |
|  |             | <b>Recommended Spare Parts/Service Parts Kits:</b> |      |      |
|  | 534M0556G04 | ▲ Complete Bearing Kit <sup>(4)</sup>              | 1    |      |
|  | 111Q0042685 | ❖ Thrust Bearing Kit, original <sup>(3)</sup>      | 1    |      |
|  | 534M0269G01 | ◆ Thrust Bearing Kit, current <sup>(2)(4)</sup>    | 1    |      |
|  | 535M0059G01 | ■ O-ring and Gasket Kit <sup>(1)</sup>             | 1    |      |
|  | 534M0163G04 | ● Shaft Seal Kit                                   | 1    |      |
|  | 534M0557G06 | ● Balance Piston Kit, original <sup>(5)</sup>      | 1    |      |
|  | 534M0557G04 | ★ Balance Piston Kit, current <sup>(5)</sup>       | 1    |      |
|  | 534A0125G01 | Compressor Tool Kit (For Disassembly/Assembly)     | 1    |      |
| <p>(1) O-ring and Gasket Kit also contains appropriate suction and discharge gaskets. When rebuilding an original design compressor the following parts need to be ordered in addition to O-ring &amp; Gasket Kit: 980A0012B98 O-ring used on both sides of Item 6, Figure 11; 980A0012H77 O-ring for Slide Stop Piston; 534C0187H04 Glyd Ring® for Slide Stop Piston; 534B0079H02 Slydring® for Slide Stop Piston.</p> <p>(2) Used with all 283SX and Serial Numbers TDSH283S-1286G and higher, and TDSH283L-1189H and higher.</p> <p>(3) Used prior to Serial Numbers TDSH283S-1286G (Exceptions are 1273G, 1274G, &amp; 1282G) and TDSH283L-1189H (Exceptions are 1168H, 1169H &amp; 1184H). Also order original Locknut 534A0035H09, and Lockwasher 534B0125H09. Roller bearings are not included in original kit and must be ordered separately.</p> <p>(4) Current Thrust Bearing Kit items are included in Complete Bearing Kit. Locknut 534A0035H14 is not included in kit, order separately.</p> <p>(5) Follow serial number breaks for Thrust Bearing Kits when ordering original or current Balance Piston Kit.</p> |             |  |      |      |

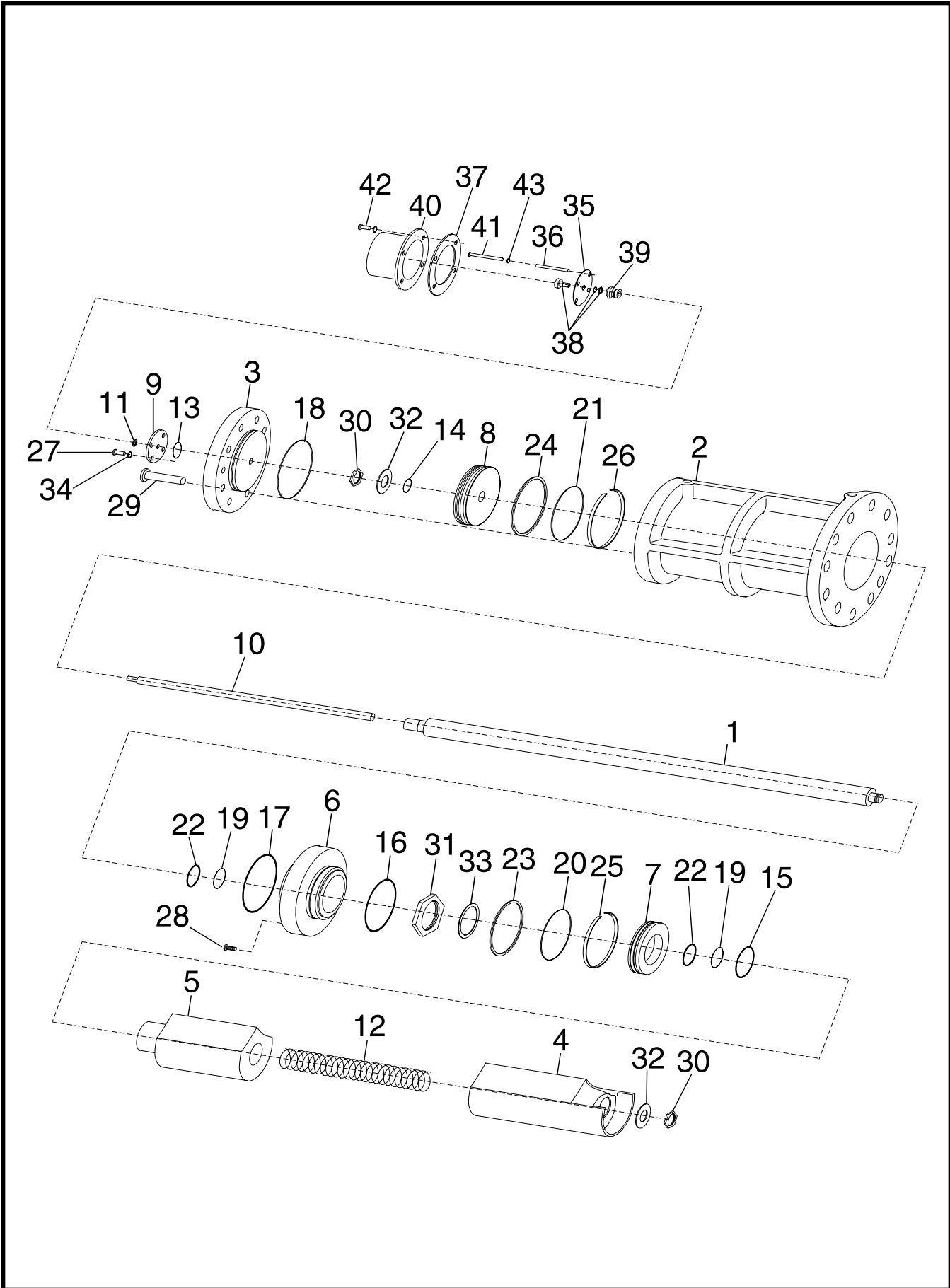


Figure 11. Slide Valve/Stop Assembly, 283.



| FIG. & INDEX | ITEM NUMBER                               | DESCRIPTION  | QTY.         | REV.   |
|--------------|---|--|--------------|--------|
| 11—          | 534D0575<br>534E0604                      | TDSH 283S/L Slide Valve/Stop Assembly<br>TDSH 283XL Slide Valve/Stop Assembly              | Ref.<br>Ref. | P<br>J |
| —1           | 534D0464G07<br>534D0464G08                | Assembly, Spindle, TDSH 283S<br>Assembly, Spindle, TDSH 283L/XL                            | 1<br>1       |        |
| —2           | 534D0160C01                               | Cylinder   | 1            |        |
| —3           | 534D0157C01                               | Cover, Cylinder  | 1            |        |
| —4           | 534D0140C01<br>534D0141C01<br>534D1048C01 | Valve, Slide, TDSH 283S<br>Valve, Slide, TDSH 283L<br>Valve, Slide, TDSH 283XL             | 1<br>1<br>1  |        |
| —5           | 534D0143C01<br>534D0144C01<br>534D1049C01 | Stop, Slide, TDSH 283S<br>Stop, Slide, TDSH 283L<br>Stop, Slide, TDSH 283XL                | 1<br>1<br>1  |        |
| —6           | 534D0500C01<br>534D0541C01                | Cover, Slide Stop, TDSH 283S<br>Cover, Slide Stop, TDSH 283L/XL                            | 1<br>1       |        |
| —7           | 534D0508C01                               | Piston, Slide Stop   | 1            |        |
| —8           | 534D0153C01                               | Piston, Spindle  | 1            |        |
| —9           | 534B0112H01                               | Plate, Backing   | 1            |        |
| —10          | 534C0201H01<br>534C0201H02                | Shaft, Potentiometer, TDSH 283S<br>Shaft, Potentiometer, TDSH 283L/XL                      | 1<br>1       |        |
| —11          | 534B0182H01                               | Collar, Clamp  | 1            |        |
| —12          | 534C1360H06<br>534C1360H07<br>534B0278H01 | Spring, Unloader, TDSH 283S<br>Spring, Unloader, TDSH 283L<br>Spring, Unloader, TDSH 283XL | 1<br>1<br>1  |        |
| —13          | 980A0014A66                               | O-ring ■   | 1            |        |
| —14          | 980A0012A76                               | O-ring ■   | 1            |        |
| —15          | 980A0012B03                               | O-ring ■   | 1            |        |
| —16          | 980A0012B95                               | O-ring ■   | 1            |        |
| —17          | 980A0012B98                               | O-ring ■   | 1            |        |
| —18          | 980A0012B99                               | O-ring ■   | 1            |        |
| —19          | 980A0012H40                               | O-ring ■   | 2            |        |
| —20          | 980A0012H73                               | O-ring ■   | 1            |        |
| —21          | 980A0012H77                               | O-ring ■   | 1            |        |
| —22          | 534B0006H06                               | Seal, Rod ■  | 2            |        |
| —23          | 534C0187H12                               | Glyd Ring ■  | 1            |        |
| —24          | 534C0187H04                               | Glyd Ring ■  | 1            |        |
| —25          | 534B0079H05                               | Slyd Ring ■  | 1            |        |
| —26          | 534B0079H02                               | Slyd Ring ■  | 1            |        |
| —27          | 111Q0740768                               | Capscrew, Socket Head, M5 x 16mm   | 4            |        |
| —28          | 111Q0740743                               | Capscrew, Socket Head, M16 x 55mm  | 5            |        |
| —29          | 111Q0740744                               | Capscrew, Socket Head, M16 x 65mm  | 8            |        |
| —30          | 534B0910H03                               | Locknut ■  | 2            |        |
| —31          | 534A0035H08                               | Locknut  | 1            |        |
| —32          | 534B0125H05                               | Lockwasher ■   | 2            |        |
| —33          | 534B0125H08                               | Lockwasher ■   | 1            |        |
| —34          | 111Q0940141                               | Lockwasher, 5mm  | 4            |        |
|              | 534D0523G01                               | Slide Valve Indication Mechanism   | Ref.         |        |
| —35          | 534B0294H01                               | Plate, Mounting*   | 1            |        |
| —36          | 534A0263H01                               | Support, Tubing*   | 4            |        |
| —37          | 534A0046H01                               | Gasket* ■  | 1            |        |
| —38          | 534B0501H01                               | Potentiometer*   | 1            |        |
| —39          | 111Q0451313                               | Coupling, Flexible*  | 1            |        |
| —40          | 534B0062C01                               | Box, Cover   | 1            |        |
| —41          | 111Q0740729                               | Capscrew, Socket Head, M5 x 60mm   | 4            |        |
| —42          | 111Q0740728                               | Capscrew, Socket Head, M6 x 16mm   | 4            |        |
| —43          | 111Q0940141                               | Lockwasher, 5mm  | 4            |        |
| *            | 534D0523G02                               | Slide Valve Potentiometer Kit (also replaces Maury Potentiometer)                          | 1            |        |

■ Item included in O-ring and Gasket Kit. See page 31.

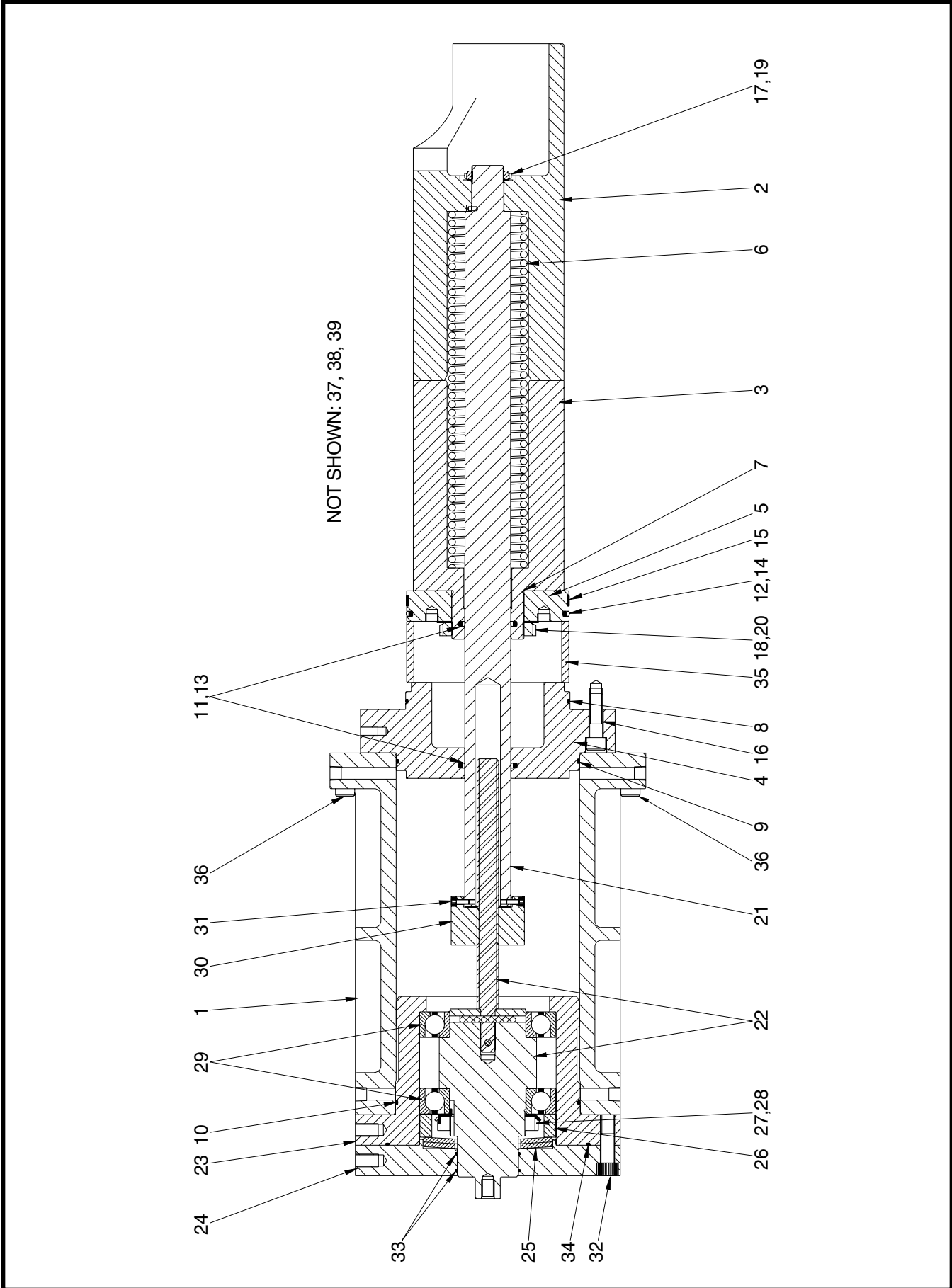


Figure 12. Slide Valve/Stop Assembly, Handwheel, 283.

| FIG. & INDEX | ITEM NUMBER | DESCRIPTION                                   | QTY. | REV. |
|--------------|-------------|---|------|------|
| 12—          | 534D0885    | TDSH 283 Slide Valve/Stop Assembly, Handwheel | Ref. | P    |
| —1           | 534D0160C01 | Cylinder                                      | 1    |      |
| —2           | 534D0140C01 | Valve, Slide, TDSH 283S                       | 1    |      |
|              | 534D0141C01 | Valve, Slide, TDSH 283L                       | 1    |      |
| —3           | 534D0143C01 | Stop, Slide, TDSH 283S                        | 1    |      |
|              | 534D0144C01 | Stop, Slide, TDSH 283L                        | 1    |      |
| —4           | 534D0500C01 | Cover, Slide Stop, TDSH 283S                  | 1    |      |
|              | 534D0541C01 | Cover, Slide Stop, TDSH 283L                  | 1    |      |
| —5           | 534D0508C01 | Piston, Slide Stop                            | 1    |      |
| —6           | 534B0117H01 | Spring, Unloader, TDSH 283S                   | 1    |      |
|              | 534B0116H01 | Spring, Unloader, TDSH 283L                   | 1    |      |
| —7           | 980A0012B03 | O-ring ■                                      | 1    |      |
| —8           | 980A0012B95 | O-ring ■                                      | 1    |      |
| —9           | 980A0012B98 | O-ring ■                                      | 1    |      |
| —10          | 980A0012B99 | O-ring ■                                      | 1    |      |
| —11          | 980A0012H40 | O-ring ■                                      | 2    |      |
| —12          | 980A0012H73 | O-ring ■                                      | 1    |      |
| —13          | 534B0006H06 | Seal, Rod ■                                   | 2    |      |
| —14          | 534C0187H12 | Ring, Glyd ■                                  | 1    |      |
| —15          | 534B0079H05 | Ring Slyd ■                                   | 1    |      |
| —16          | 111Q0740743 | Capscrew, Socket Head, M16 x 55               | 5    |      |
| —17          | 534B0910H03 | Locknut ■                                     | 1    |      |
| —18          | 534A0035H08 | Locknut                                       | 1    |      |
| —19          | 534B0125H05 | Lockwasher ■                                  | 1    |      |
| —20          | 534B0125H08 | Lockwasher ■                                  | 1    |      |
| —21          | 534D0899H01 | Spindle, TDSH 283S                            | 1    |      |
|              | 534D0883H01 | Spindle, TDSH 283L                            | 1    |      |
| —22          | 534C1042G01 | Assembly, Shaft                               | 1    |      |
| —23          | 534D1011C01 | Housing, Bearing                              | 1    |      |
| —24          | 534D1010H01 | Plate, Face                                   | 1    |      |
| —25          | 534A0528H01 | Washer, Spring                                | 2    |      |
| —26          | 534B0566H01 | Spacer  | 1    |      |
| —27          | 534A0035H09 | Locknut                                       | 1    |      |
| —28          | 534B0125H09 | Lockwasher ■                                  | 1    |      |
| —29          | 534C1170H02 | Bearing, Ball                                 | 2    |      |
| —30          | 534C1041H01 | Nut, Spindle                                  | 1    |      |
| —31          | 534A0541H01 | Capscrew, Socket Head, M6 x 16mm              | 8    |      |
| —32          | 111Q0740747 | Capscrew, Socket Head, M16 x 85               | 8    |      |
| —33          | 333Q0000801 | O-ring ■                                      | 1    |      |
| —34          | 980A0012H04 | O-ring ■                                      | 1    |      |
| —35          | 534C0453H23 | Spacer, TDSH 283S                             | 1    |      |
|              | 534C0453H26 | Spacer, TDSH 283L                             | 1    |      |
| —36          | 111Q0740774 | Capscrew, Socket Head, M16 x 120              | 4    |      |
|              | 111Q0740744 | Capscrew, Socket Head, M16 x 65               | 8    |      |
|              |             | Not Shown:                                    |      |      |
| —37          | 581B0001H06 | Wheel, Hand                                   | 1    |      |
| —38          | 581A0011H03 | Washer, Spring                                | 1    |      |
| —39          | 901A0045D01 | Bolt, Hex Head, 1/2-13 UNC x 3/4"             | 1    |      |

■ Item included in O-ring and Gasket Kit. See page 31.

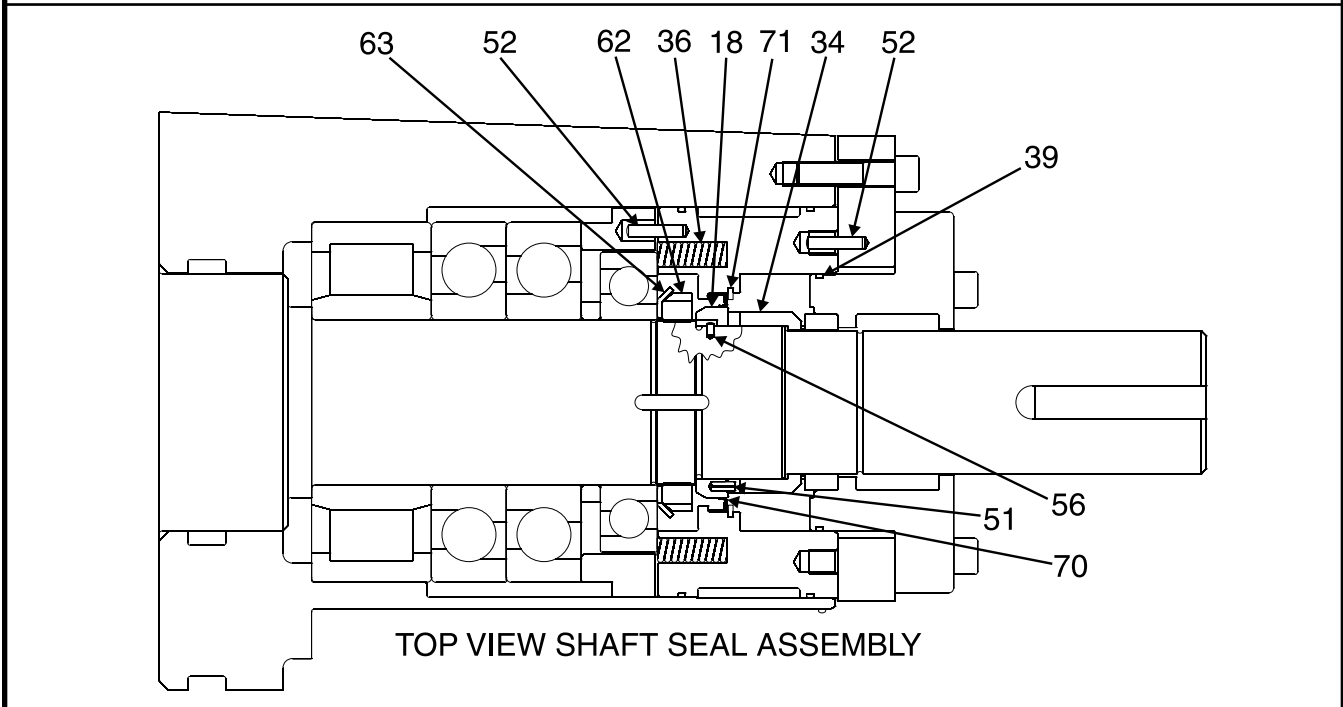
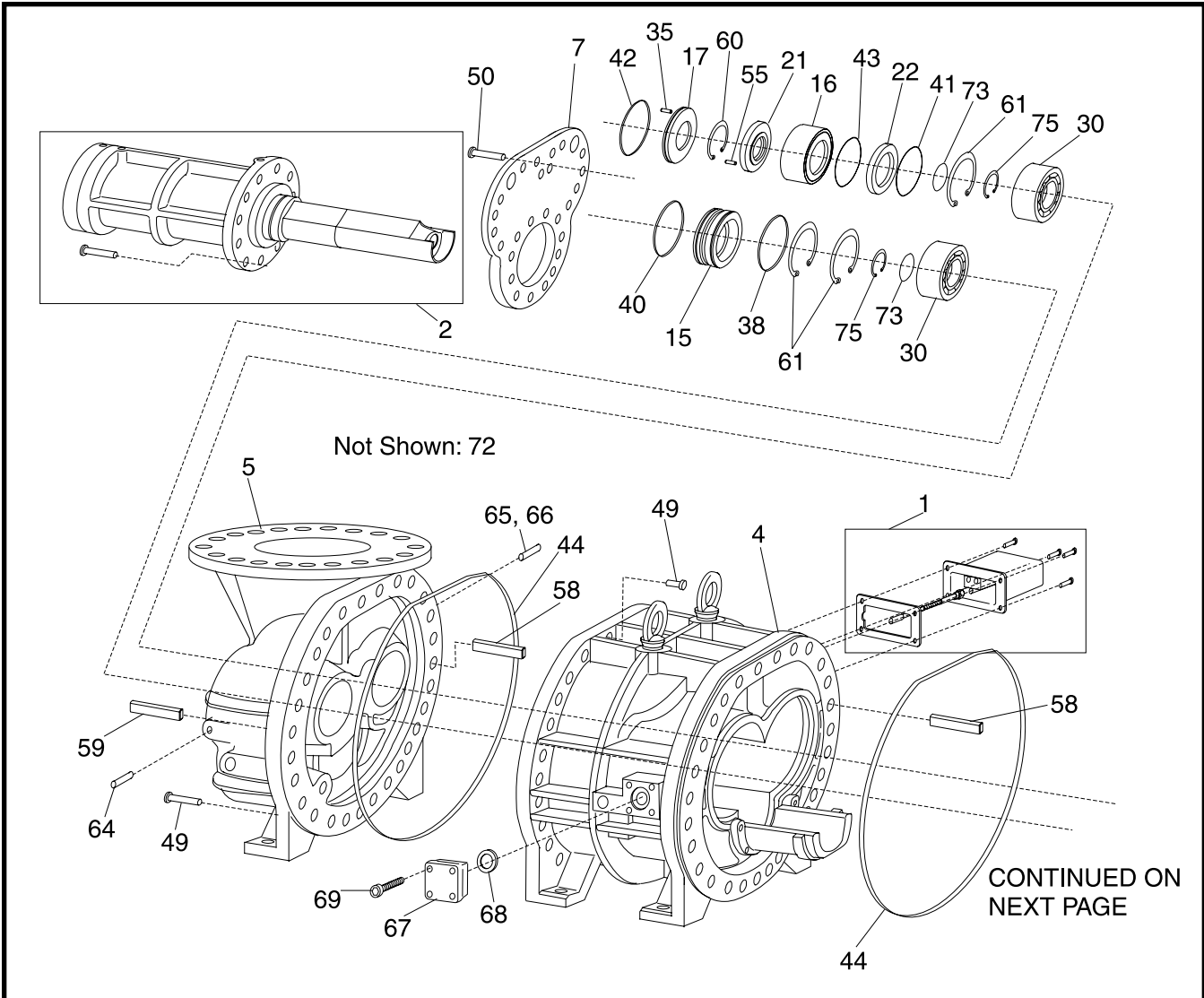


Figure 13a. Screw Compressor, TDSH 355.

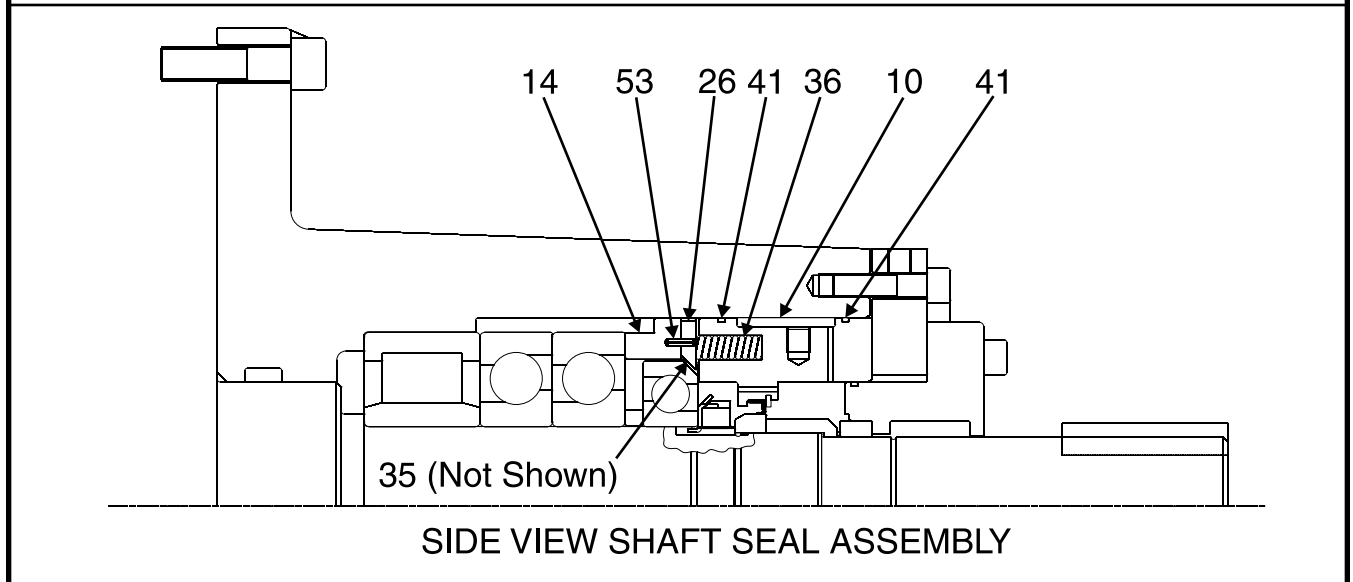
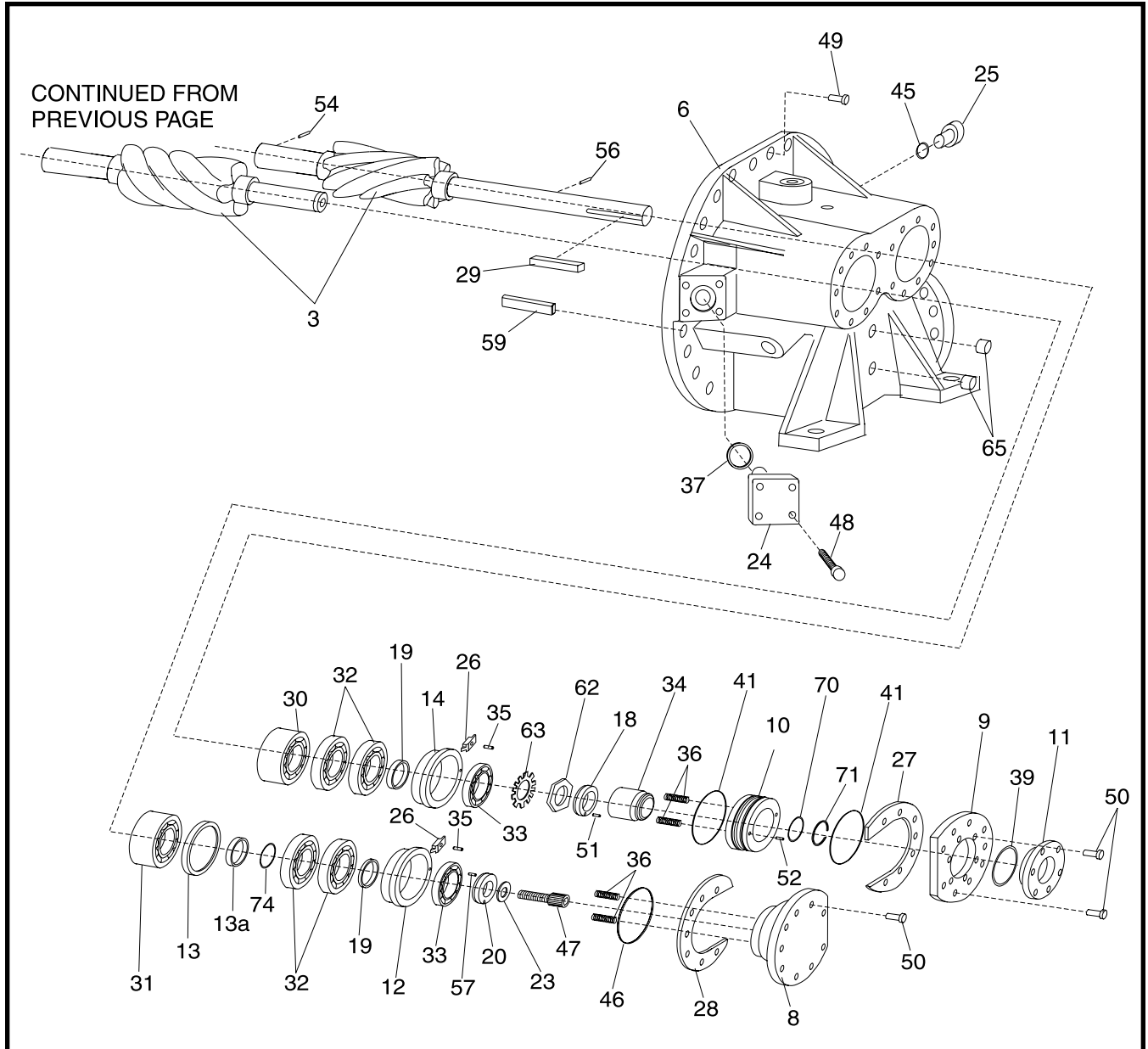


Figure 13b. Screw Compressor, TDSH 355.

| FIG. & INDEX | ITEM NUMBER | DESCRIPTION                                      | QTY. | REV. |
|--------------|-------------|--|------|------|
| 13—          | 534E0309G02 | TDSH 355S, Screw Compressor, New                 | Ref. | AL   |
|              | 534E0309G01 | TDSH 355L, Screw Compressor, New                 | Ref. | AL   |
|              | 534E0309G05 | TDSH 355XL, Screw Compressor, New                | Ref. | AL   |
|              | 534E0309S02 | TDSH 355S, Screw Compressor, Rebuilt             | Ref. |      |
|              | 534E0309S01 | TDSH 355L, Screw Compressor, Rebuilt             | Ref. |      |
|              | 534E0309S05 | TDSH 355XL, Screw Compressor, Rebuilt            | Ref. |      |
|              | 534E0532G02 | TDSH 355S, Screw Compressor, Handwheel, New      | Ref. | U    |
|              | 534E0532G01 | TDSH 355L, Screw Compressor, Handwheel, New      | Ref. | U    |
|              | 534E0532G03 | TDSH 355XL, Screw Compressor, Handwheel, New     | Ref. | U    |
| —1           | —           | Slide Stop Indication Assembly (See Figure 17)   | Ref. |      |
| —2           | —           | Slide Valve/Stop Assembly (See Figure 15 & 16)   | Ref. |      |
| —3           | 534A0837G02 | Rotor Pair, TDSH 355L, and Booster               | 1    |      |
|              | 534A0836G02 | Rotor Pair, TDSH 355S, and Booster               | 1    |      |
|              | 534A0838G02 | Rotor Pair, TDSH 355XL, and Booster              | 1    |      |
| —4           | 534D0407G02 | Assembly, Casing, Rotor, TDSH 355S, and Booster  | 1    |      |
|              | 534C0194H42 | Plug, Pipe, 1/2 NPTF w/.210" Orifice (HW)        | 1    |      |
|              | 534C0194H53 | Plug, Pipe, 1-1/4 NPTF w/.500" Orifice (S)       | 1    |      |
|              | 534C0194H55 | Plug, Pipe, 1-1/4 NPTF w/.385" Orifice (Booster) | 1    |      |
|              | 534D0407G03 | Assembly, Casing, Rotor, TDSH 355L               | 1    |      |
|              | 534C0194H42 | Plug, Pipe, 1/2 NPTF w/.210" Orifice (HW)        | 1    |      |
|              | 534C0192H52 | Plug, Pipe, 1-1/4 NPTF w/.609" Orifice (L)       | 1    |      |
|              | 534D0407G01 | Assembly, Casing, Rotor, TDSH 355L Booster       | 1    |      |
|              | 534C0194H54 | Plug, Pipe, 1-1/4NPTF w/.422" Orifice            | 1    |      |
|              | 534D0407G04 | Assembly, Casing, Rotor, TDSH XL, and Booster    | 1    |      |
|              | 534C0194H42 | Plug, Pipe, 1/2 NPTF w/.210" Orifice (HW)        | 1    |      |
|              | 534C0194H51 | Plug, Pipe, 1-1/4 NPTF w/.709" Orifice (XL)      | 1    |      |
|              | 534C0194H53 | Plug, Pipe, 1-1/4 NPTF w/.500" Orifice (Booster) | 1    |      |
| —5           | 534E0181C01 | Casing, Inlet                                    | 1    |      |
| —6           | 534E1076C01 | Casing, Discharge                                | 1    |      |
| —7           | 534D0370C01 | Cover, Inlet                                     | 1    |      |
| —8           | 534D1402C01 | Cover, Outlet                                    | 1    |      |
| —9           | 534D1400C01 | Cover, Seal Housing                              | 1    |      |
| —10          | 534D1401C01 | Spacer, Seal Housing                             | 1    |      |
| —11          | 534D0766C01 | Cover, Housing                                   | 1    |      |
| —12          | 534C1661H02 | Spacer, Bearing Preload (Female)                 | 1    |      |
| —13          | 534D0412C01 | Spacer, Bearing                                  | 1    |      |
| —13a         | 534C1587H01 | Spacer, Bearing Race                             | 1    |      |
| —14          | 534C1661H01 | Spacer, Bearing Preload (Male)                   | 1    |      |
| —15          | 534D0375C01 | Cover, Female Inlet Bore                         | 1    |      |
| —16          | 534D0391C01 | Sleeve, Male Balance Piston ★                    | 1    |      |
| —17          | 534D0374C01 | Cover, Male Inlet Bore                           | 1    |      |
| —18          | 534C0487H01 | Ring, Seal Distance                              | 1    |      |
| —19          | 534B0238H01 | Spacer, Bearing                                  | 2    |      |
| —20          | 534C0492H01 | Plate, Bearing                                   | 1    |      |
| —21          | 534D0639H01 | Piston, Male Balance ★                           | 1    |      |
| —22          | 534D0392H01 | Ring, Male ★                                     | 1    |      |
| —23          | 534B0239H01 | Washer   | 1    |      |
| —24          | 534C0493C01 | Plug, Vapor Injection                            | 1    |      |
| —25          | 534C0569H01 | Plug, Liquid Injection                           | 1    |      |
| —26          | 534A0870H01 | Key, Anti rotation                               | 2    |      |
| —27          | 534D0408G01 | Shim Pack (Male) ▲◆                              | 1    |      |
| —28          | 534D0409G01 | Shim Pack (Female) ▲◆                            | 1    |      |
| —29          | 534A0662H04 | Key, Square                                      | 1    |      |
| —30          | 534B0004H26 | Bearing, Roller, Cylindrical ▲                   | 3    |      |
| —31          | 534B0004H25 | Bearing, Roller, Cylindrical ▲                   | 1    |      |
| —32          | 534C0478H05 | Bearing, Ball, Angular Contact ▲◆                | 4    |      |
| —33          | 534C0478H07 | Bearing, Ball, Angular Contact ▲◆                | 2    |      |

| FIG. & INDEX | ITEM NUMBER | DESCRIPTION  | QTY. | REV. |
|--------------|-------------|--|------|------|
| —34          | 534C0701H06 | Shaft Seal ●                                       | 1    |      |
| —35          | 534A0037H21 | Pin, Dowel, 8m6 x 40                               | 3    |      |
| —36          | 534A0251H01 | Spring   | 24   |      |
| —37          | 959A0057H18 | Gasket, Flange ■                                   | 1    |      |
| —38          | 980A0012H01 | O-ring ■   | 1    |      |
| —39          | 980A0012B90 | O-ring ■ ●   | 1    |      |
| —40          | 980A0012H02 | O-ring ■   | 1    |      |
| —41          | 980A0012H04 | O-ring ■ ● ★ *                                     | 3    |      |
| —42          | 980A0012H05 | O-ring ■   | 1    |      |
| —43          | 980A0012H03 | O-ring ■   | 1    |      |
| —44          | 980A0012K75 | O-ring ■   | 2    |      |
| —45          | 980A0012K74 | O-ring ■   | 2    |      |
| —46          | 980A0012H06 | O-ring ■ ▲ ◆                                       | 1    |      |
| —47          | 534A0076H04 | Capscrew, Socket Head, 1-8 UNC x 3-1/2" ▲ ◆        | 1    |      |
| —48          | 111Q0740772 | Capscrew, Socket Head, M20 x 75mm                  | 4    |      |
| —49          | 111Q0740808 | Capscrew, Socket Head, M24 x 90mm                  | 46   |      |
|              | 111Q0740872 | Capscrew, Socket Head, M24 x 100mm                 | 2    |      |
| —50          | 111Q0740744 | Capscrew, Socket Head, M16 x 65mm                  | 51   |      |
| —51          | 534A0038H08 | Pin, Spring, .250 x .625" ●                        | 1    |      |
| —52          | 534A0037H21 | Pin, Dowel, 8m6 x 40 ● ★                           | 3    |      |
| —53          | 534A0038H09 | Pin, Spring, .187 x .750" ▲ ◆                      | 2    |      |
| —54          | 534A0037H19 | Pin, Dowel, 10h8 x 20mm ★                          | 1    |      |
| —55          | 534A0037H10 | Pin, Dowel, 5m6 x 24mm ★                           | 1    |      |
| —56          | 534A0037H12 | Pin, Dowel, 5h8 x 10mm ●                           | 1    |      |
| —57          | 534A0037H15 | Pin, Dowel, 10h8 x 45mm ▲ ◆                        | 1    |      |
| —58          | 534B0149H01 | Pin, Dowel, 20 x 70mm                              | 2    |      |
| —59          | 534B0151H01 | Pin, Dowel, 20 x 70mm, Special                     | 2    |      |
| —60          | 534B0244H01 | Ring, Retaining ★                                  | 1    |      |
| —61          | 534B0174H09 | Ring, Retaining ▲                                  | 3    |      |
| —62          | 534A0035H13 | Locknut  | 1    |      |
| —63          | 534B0125H13 | Lockwasher ▲ ◆                                     | 1    |      |
| —64          | 944A0008H04 | Plug, Pipe, 1/2-14 NPTF                            | 2    |      |
| —65          | 944A0008H05 | Plug, Pipe, 3/4-14 NPTF                            | 5    |      |
| —66          | 534B0325H01 | Plug, Orifice, Balance Piston, Booster Application | 1    |      |
| —67          | 944A0358H03 | Flange, Square, Socket Weld                        | 1    |      |
| —68          | 959A0057H07 | Gasket, Flange ■                                   | 1    |      |
| —69          | 111Q0740720 | Capscrew, Socket Head, M16 x 60mm                  | 4    |      |
| —70          | 534B0426H01 | Seal, Lip ● *                                      | 1    |      |
| —71          | 333Q0000376 | Ring, Retaining ●                                  | 1    |      |
| —72          | 980A0012K66 | O-ring, Coalescer Bleed Plug, Port SD-1■           | 1    |      |
| —73          | 980A0012B73 | O-ring ■ ▲   | 2    |      |
| —74          | 980A0012B81 | O-ring ■   | 1    |      |
| —75          | 534B0014H22 | Ring, Retaining                                    | 2    |      |
|              |             | Recommended Spare Parts/Service Parts Kits         |      |      |
|              | 534A0919G01 | ▲ Complete Bearing Kit                             | 1    |      |
|              | 534M0027G02 | ◆ Thrust Bearing Kit <sup>(1)</sup>                | 1    |      |
|              | 534M0027G03 | ■ O-ring and Gasket Kit <sup>(2)</sup>             | 1    |      |
|              | 534M0163G05 | ● Shaft Seal Kit <sup>(3)</sup>                    | 1    |      |
|              | 534M0557G05 | ★ Balance Piston Kit                               | 1    |      |
|              | 534M0280G01 | * Lip Seal Kit <sup>(4)</sup>                      | 1    |      |
|              | 534A0213G01 | Compressor Tool Kit (For Disassembly/Assembly)     | 1    |      |

(1) Thrust Bearing Kit items are included in Complete Bearing Kit.  
(2) O-ring and Gasket Kit also contains appropriate suction and discharge gaskets.  
(3) Shaft Seal Kit contains seal installation tools.  
(4) Lip Seal Kit items are included in Shaft Seal Kit. For models made prior to lip seal installation, use Lip Seal Retrofit Kit 534D0768G01.

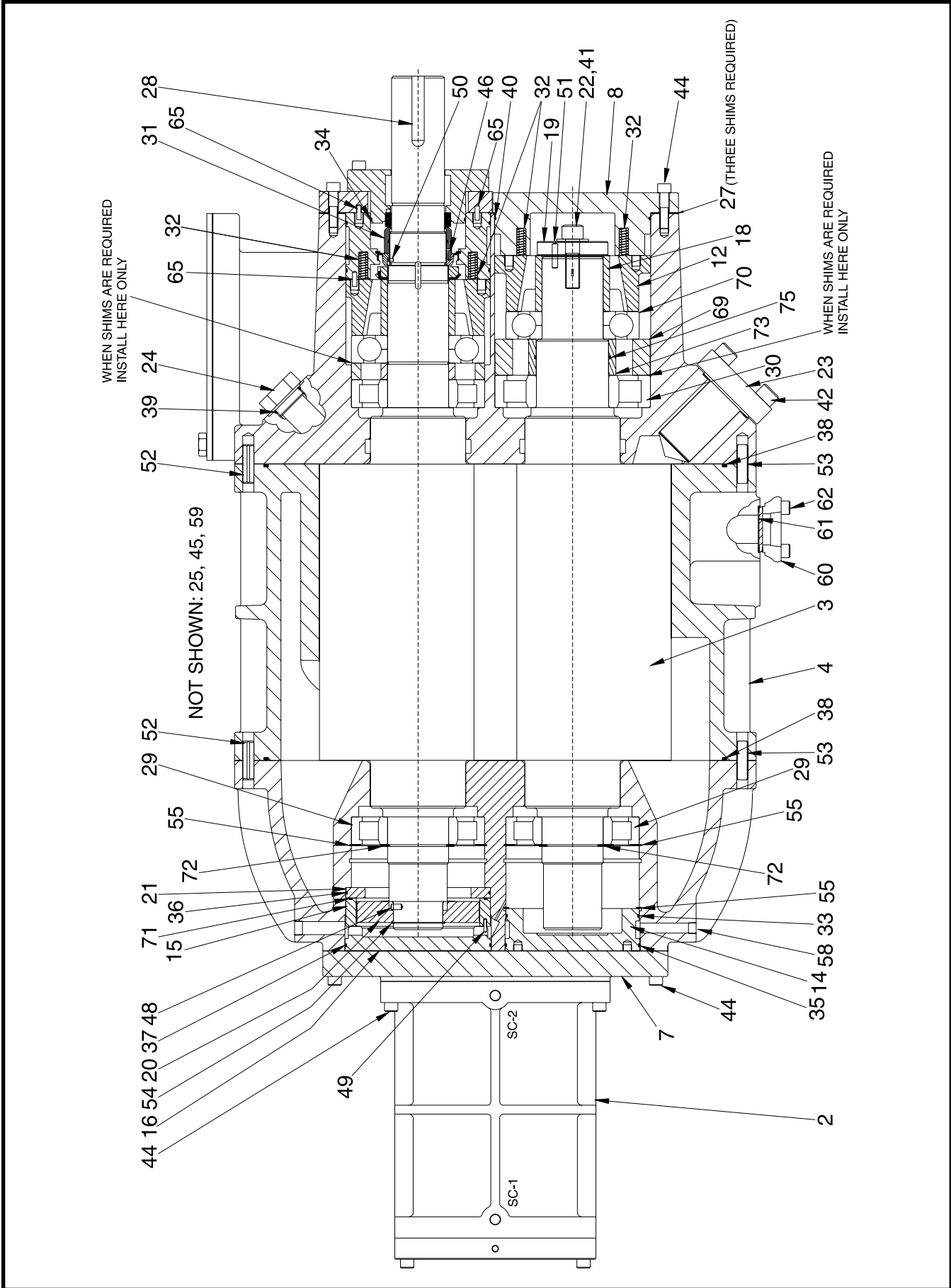


Figure 14a. Screw Compressor, TDSB 355.



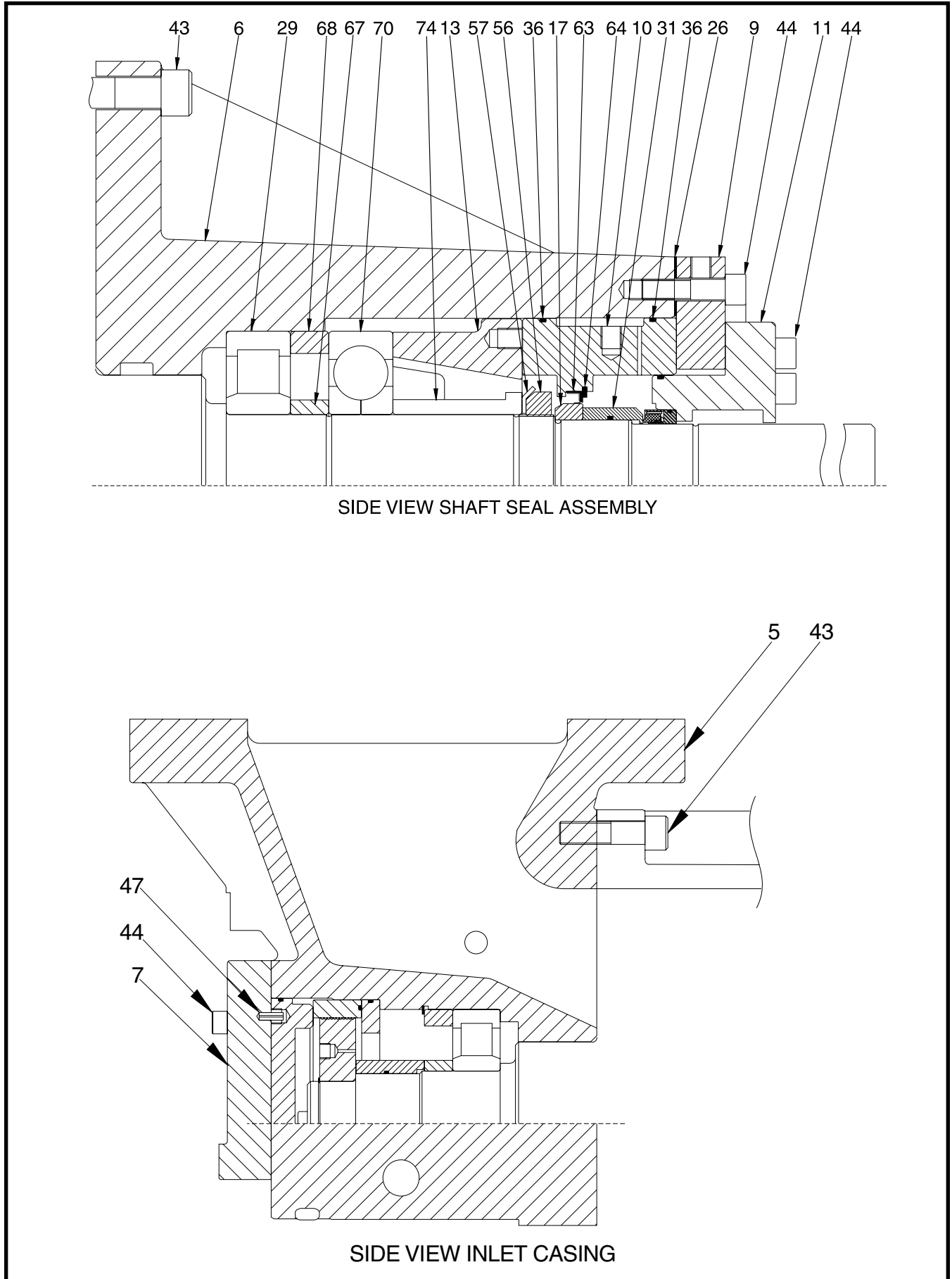


Figure 14b. Screw Compressor, TDSB 355.

| FIG. & INDEX | ITEM NUMBER | DESCRIPTION  | QTY. | REV. |
|--------------|-------------|--|------|------|
| 14—          | 534E0645    | TDSB 355S/L/XL, Screw Compressor, New              | Ref. | T    |
| —1           | —           | Slide Stop Indication Assembly (See Figure 17)     | Ref. |      |
| —2           | —           | Slide Valve/Stop Assembly (See Figure 15 & 16)     | Ref. |      |
| —3           | 534A0836G02 | Rotor Pair, TDSB 355L                              | 1    |      |
|              | 534A0837G02 | Rotor Pair, TDSB 355S                              | 1    |      |
|              | 534A0838G02 | Rotor Pair, TDSB 355XL                             | 1    |      |
| —4           | 534D0407G02 | Casing, Rotor, TDSB 355S                           | 1    |      |
|              | 534C0194H42 | Plug, Pipe, 1/2 NPTF w/.210" Orifice               | 1    |      |
|              | 534C0194H53 | Plug, Pipe, 1-1/4 NPTF w/.500" Orifice (Port SB-2) | 1    |      |
|              | 534D0407G03 | Casing, Rotor, TDSB 355L                           | 1    |      |
|              | 534C0194H42 | Plug, Pipe, 1/2 NPTF w/.210" Orifice               | 1    |      |
|              | 534C0194H52 | Plug, Pipe, 1-1/4NPTF w/.609" Orifice (Port SB-2)  | 1    |      |
|              | 534D0407G04 | Casing, Rotor, TDSB 355XL                          | 1    |      |
|              | 534C0194H42 | Plug, Pipe, 1/2 NPTF w/.210" Orifice               | 1    |      |
|              | 534C0194H51 | Plug, Pipe, 1-1/4 NPTF w/.709" Orifice (Port SB-2) | 1    |      |
| —5           | 534E0181C01 | Casing, Inlet                                      | 1    |      |
| —6           | 534E1076C01 | Casing, Discharge                                  | 1    |      |
| —7           | 534D0370C01 | Cover, Inlet                                       | 1    |      |
| —8           | 534D1402C01 | Cover, Outlet                                      | 1    |      |
| —9           | 534D1400C01 | Cover, Seal Housing                                | 1    |      |
| —10          | 534D1401C01 | Spacer, Seal Housing                               | 1    |      |
| —11          | 534D0766C01 | Cover, Housing                                     | 1    |      |
| —12          | 534D1135C02 | Spacer, Bearing Preload (Female)                   | 1    |      |
| —13          | 534C1135C01 | Spacer, Bearing Preload (Male)                     | 1    |      |
| —14          | 534D0375C01 | Cover, Female Inlet Bore                           | 1    |      |
| —15          | 534D0391C01 | Sleeve, Male Balance Piston ★                      | 1    |      |
| —16          | 534D0374C01 | Cover, Male Inlet Bore                             | 1    |      |
| —17          | 534C0487H01 | Ring, Seal Distance                                | 1    |      |
| —18          | 534B0651H01 | Spacer, Bearing                                    | 1    |      |
| —19          | 534C0492H01 | Plate, Bearing                                     | 1    |      |
| —20          | 534D0639H01 | Piston, Male Balance ★                             | 1    |      |
| —21          | 534D0392H01 | Ring, Male ★                                       | 1    |      |
| —22          | 534B0239H01 | Washer   | 1    |      |
| —23          | 534C0493C01 | Plug, Vapor Injection (Port SV-1)                  | 1    |      |
|              | 959A0057H18 | Gasket, Flange                                     | 1    |      |
| —24          | 534C0569H01 | Plug, Liquid Injection (Port SL-2)                 | 1    |      |
| —25          | 534C0570H01 | Plug, Liquid Injection, not shown (Port SL-1)      | 1    |      |
| —26          | 534D0408G01 | Shim Pack, Male                                    | 1    |      |
| —27          | 534D0409G01 | Shim Pack, Female                                  | 1    |      |
| —28          | 534A0662H04 | Key, Square  | 1    |      |
| —29          | 534B0004H34 | Bearing, Roller, Cylindrical                       | 3    |      |
| —30          | 534B0004H33 | Bearing, Roller, Cylindrical                       | 1    |      |
| —31          | 534C0701H06 | Shaft Seal ●                                       | 1    |      |
| —32          | 534A0251H01 | Spring   | 24   |      |
| —33          | 980A0012H01 | O-ring ■   | 1    |      |
| —34          | 980A0012B90 | O-ring ■ ●   | 1    |      |
| —35          | 980A0012H02 | O-ring ■   | 1    |      |
| —36          | 980A0012H04 | O-ring ■ ● ★ *                                     | 5    |      |
| —37          | 980A0012H05 | O-ring ■   | 1    |      |
| —38          | 980A0012K75 | O-ring ■   | 2    |      |
| —39          | 980A0012K74 | O-ring ■   | 2    |      |
| —40          | 980A0012H06 | O-ring ■   | 1    |      |

| FIG. & INDEX | ITEM NUMBER | DESCRIPTION                                    | QTY. | REV. |
|--------------|-------------|--|------|------|
| —41          | 534A0076H04 | Capscrew, Socket Head, 1-8 UNC x 3-1/2"        | 1    |      |
| —42          | 111Q0740772 | Capscrew, Socket Head, M20 x 75mm              | 4    |      |
| —43          | 111Q0740808 | Capscrew, Socket Head, M24 x 90mm              | 46   |      |
| —44          | 111Q0740744 | Capscrew, Socket Head, M16 x 65mm              | 65   |      |
| —45          | 111Q0740872 | Capscrew, Socket Head, M24 x 100mm             | 2    |      |
| —46          | 540A0038H08 | Pin, Spring, .250 x .625" ●                    | 1    |      |
| —47          | 540A0038H10 | Pin, Spring, .312 x 1.00" ●★                   | 1    |      |
| —48          | 534A0037H19 | Pin, Dowel, 10h8 x 20mm ★                      | 1    |      |
| —49          | 534A0037H10 | Pin, Dowel, 5m6 x 24mm ★                       | 1    |      |
| —50          | 534A0037H12 | Pin, Dowel, 5h8 x 10mm ●                       | 1    |      |
| —51          | 534A0037H15 | Pin, Dowel, 10h8 x 45mm                        | 1    |      |
| —52          | 534B0149H01 | Pin, Dowel, 20 x 70mm                          | 2    |      |
| —53          | 534B0151H01 | Pin, Dowel, 20 x 70mm, Special                 | 2    |      |
| —54          | 534B0244H01 | Ring, Retaining ★                              | 1    |      |
| —55          | 534B0174H09 | Ring, Retaining                                | 3    |      |
| —56          | 534A0035H13 | Locknut  | 1    |      |
| —57          | 534B0125H13 | Lockwasher                                     | 1    |      |
| —58          | 944A0008H04 | Plug, Pipe, 1/2-14 NPTF                        | 6    |      |
| —59          | 944A0008H05 | Plug, Pipe, 3/4-14 NPTF                        | 5    |      |
| —60          | 944A0356H03 | Flange   | 1    |      |
| —61          | 959A0057H07 | Gasket, Flange ■                               | 1    |      |
| —62          | 111Q0740720 | Capscrew, Socket Head, M16 x 60mm              | 4    |      |
| —63          | 534B0426H01 | Seal, Lip ●*                                   | 1    |      |
| —64          | 333Q0000376 | Ring, Retaining ●                              | 1    |      |
| —65          | 534A0037H21 | Pin, Dowel, 8m6 x 40                           | 3    |      |
| —66          | —           |  |      |      |
| —67          | 534B0652H01 | Spacer, Bearing                                | 3    |      |
| —68          | 534B0653H01 | Spacer, Bearing                                | 3    |      |
| —69          | 534D1137H01 | Spacer, Bearing                                | 1    |      |
| —70          | 534B0101H28 | Bearing, Ball, Four Point Contact              | 2    |      |
| —71          | 980A0012H03 | O-ring   | 2    |      |
| —72          | 534B0014H22 | Ring, Retaining                                | 2    |      |
| —73          | 534C1587H02 | Spacer, Bearing                                | 1    |      |
| —74          | 534C1568H01 | Spacer, Bearing                                | 1    |      |
| —75          | 980A0012B81 | O-ring   | 1    |      |
|              |             | Recommended Spare Parts/Service Parts Kits     |      |      |
|              | 534A0920G01 | ▲ Complete Bearing Kit                         | 1    |      |
|              | N/A         | ◆ Thrust Bearing Kit <sup>(4)</sup>            | -    |      |
|              | 534M0027G03 | ■ O-ring and Gasket Kit <sup>(1)</sup>         | 1    |      |
|              | 534M0163G05 | ● Shaft Seal Kit <sup>(2)</sup>                | 1    |      |
|              | 534M0557G05 | ★ Balance Piston Kit                           | 1    |      |
|              | 534M0280G01 | * Lip Seal Kit <sup>(3)</sup>                  | 1    |      |
|              | 534A0213G01 | Compressor Tool Kit (For Disassembly/Assembly) | 1    |      |

(1) O-ring and Gasket Kit also contains appropriate suction and discharge gaskets.  
(2) Shaft Seal Kit contains seal installation tools.  
(3) Lip Seal Kit items are included in Shaft Seal Kit.  
(4) No Kit. Order two each 534B0101H28 Bearings.

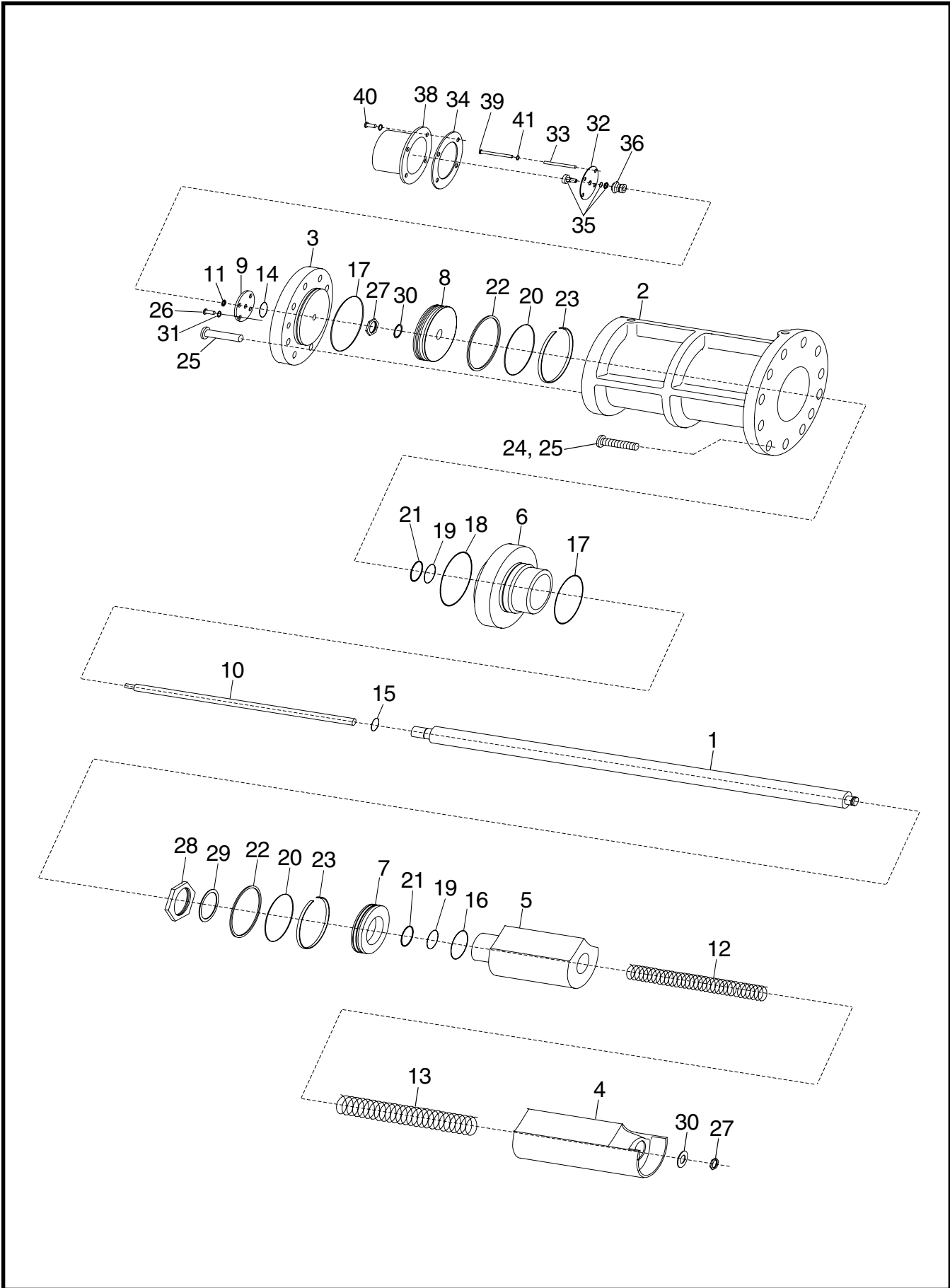


Figure 15. Slide Valve/Stop Assembly, 355.

| FIG. & INDEX | ITEM NUMBER                               | DESCRIPTION  | QTY.         | REV.    |
|--------------|---|--|--------------|---------|
| 15—          | 534E0309<br>534E0645                      | TDSH 355 Slide Valve/Stop Assembly<br>TDSB 355 Slide Valve/Stop Assembly   | Ref.<br>Ref. | AL<br>T |
| —1           | 534D0464G13<br>534D0464G14<br>534D0464G15 | Assembly, Spindle, TDSH/TDSB 355S, and Booster<br>Assembly, Spindle, TDSH/TDSB 355L, and Booster<br>Assembly, Spindle, TDSH 355XL, and Booster               | 1<br>1<br>1  |         |
| —2           | 534E0683C01                               | Cylinder   | 1            |         |
| —3           | 534D0369C01                               | Cover, Cylinder  | 1            |         |
| —4           | 534D0365C01<br>534D0429C01<br>534D0859C01 | Valve, Slide, TDSH/TDSB 355L, and Booster<br>Valve, Slide, TDSH/TDSB 355S, and Booster<br>Valve, Slide, TDSH/TDSB 355XL, and Booster                         | 1<br>1<br>1  |         |
| —5           | 534D0366C01<br>534D0430C01<br>534D0861C01 | Stop, Slide, TDSH/TDSB 355L, and Booster<br>Stop, Slide, TDSH/TDSB 355S, and Booster<br>Stop, Slide, TDSH/TDSB 355XL, and Booster                            | 1<br>1<br>1  |         |
| —6           | 534D0373C01<br>534D0862C01                | Cover, Slide Stop, TDSH/TDSB 355S/L, and Booster<br>Cover, Slide Stop, TDSH/TDSB 355XL, and Booster  | 1<br>1       |         |
| —7           | 534D0367C01<br>534D0431C01                | Piston, Slide Stop, TDSH/TDSB 355L/XL, and Booster<br>Piston, Slide Stop, TDSH/TDSB 355S, and Booster  | 1<br>1       |         |
| —8           | 534D0368C01                               | Piston, Spindle  | 1            |         |
| —9           | 534B0112H01                               | Plate, Backing   | 1            |         |
| —10          | 534C1356H01<br>534C1356H02<br>534C1356H03 | Shaft, Potentiometer, TDSH/TDSB 355S, and Booster<br>Shaft, Potentiometer, TDSH/TDSB 355L, and Booster<br>Shaft, Potentiometer, TDSH/TDSB 355XL, and Booster | 1<br>1<br>1  |         |
| —11          | 534B0182H01                               | Collar, Clamp  | 1            |         |
| —12          | 534B0240H01<br>534B0249H01                | Spring, Unloader, TDSH/TDSB 355L/XL, and Booster<br>Spring, Unloader, TDSH/TDSB 355S, and Booster  | 1<br>1       |         |
| —13          | 534B0242H01<br>534B0250H01                | Spring, Unloader, TDSH/TDSB 355L/XL, and Booster<br>Spring, Unloader, TDSH/TDSB 355S, and Booster  | 1<br>1       |         |
| —14          | 980A0012A67                               | O-ring ■   | 1            |         |
| —15          | 980A0012A79                               | O-ring ■   | 1            |         |
| —16          | 980A0012B04                               | O-ring ■   | 1            |         |
| —17          | 980A0012H04                               | O-ring ■   | 2            |         |
| —18          | 980A0012H03                               | O-ring ■   | 1            |         |
| —19          | 980A0012H41                               | O-ring ■   | 2            |         |
| —20          | 980A0012H81                               | O-ring ■   | 2            |         |
| —21          | 534B0006H07                               | Seal, Rod ■  | 2            |         |
| —22          | 534C0187H11                               | Glyd Ring ■  | 2            |         |
| —23          | 534C0510H01                               | Slyd Ring ■  | 2            |         |
| —24          | 111Q0740774                               | Capscrew, Socket Head, M16 x 120mm   | 10           |         |
| —25          | 111Q0740744                               | Capscrew, Socket Head, M16 x 65mm  | 14           |         |
| —26          | 111Q0740768                               | Capscrew, Socket Head, M5 x 16mm   | 4            |         |
| —27          | 534B0910H04                               | Locknut ■  | 2            |         |
| —28          | 534A0035H09                               | Locknut  | 1            |         |
| —29          | 534B0125H09                               | Lockwasher ■   | 1            |         |
| —30          | 534B0125H14                               | Lockwasher ■   | 1            |         |
| —31          | 111Q0940141                               | Lockwasher   | 4            |         |
|              | 534D0523G01                               | Slide Valve Indication Mechanism   | Ref.         |         |
| —32          | 534B0294H01                               | Plate, Mounting*   | 1            |         |
| —33          | 534A0263H01                               | Support, Tubing*   | 4            |         |
| —34          | 534A0046H01                               | Gasket* ■  | 1            |         |
| —35          | 534B0501H01                               | Potentiometer*   | 1            |         |
| —36          | 111Q0451313                               | Coupling, Flexible*  | 1            |         |
| —38          | 534B0062C01                               | Box, Cover   | 1            |         |
| —39          | 111Q0740729                               | Capscrew, Socket Head, M5 x 60mm   | 4            |         |
| —40          | 111Q0740728                               | Capscrew, Socket Head, M6 x 16mm   | 4            |         |
| —41          | 111Q0940141                               | Lockwasher, 5mm  | 4            |         |
| *            | 534D0523G02                               | Slide Valve Potentiometer Kit (also replaces Maury potentiometer)  | 1            |         |

■ Item included in O-ring and Gasket Kit. See pages 39 and 43.

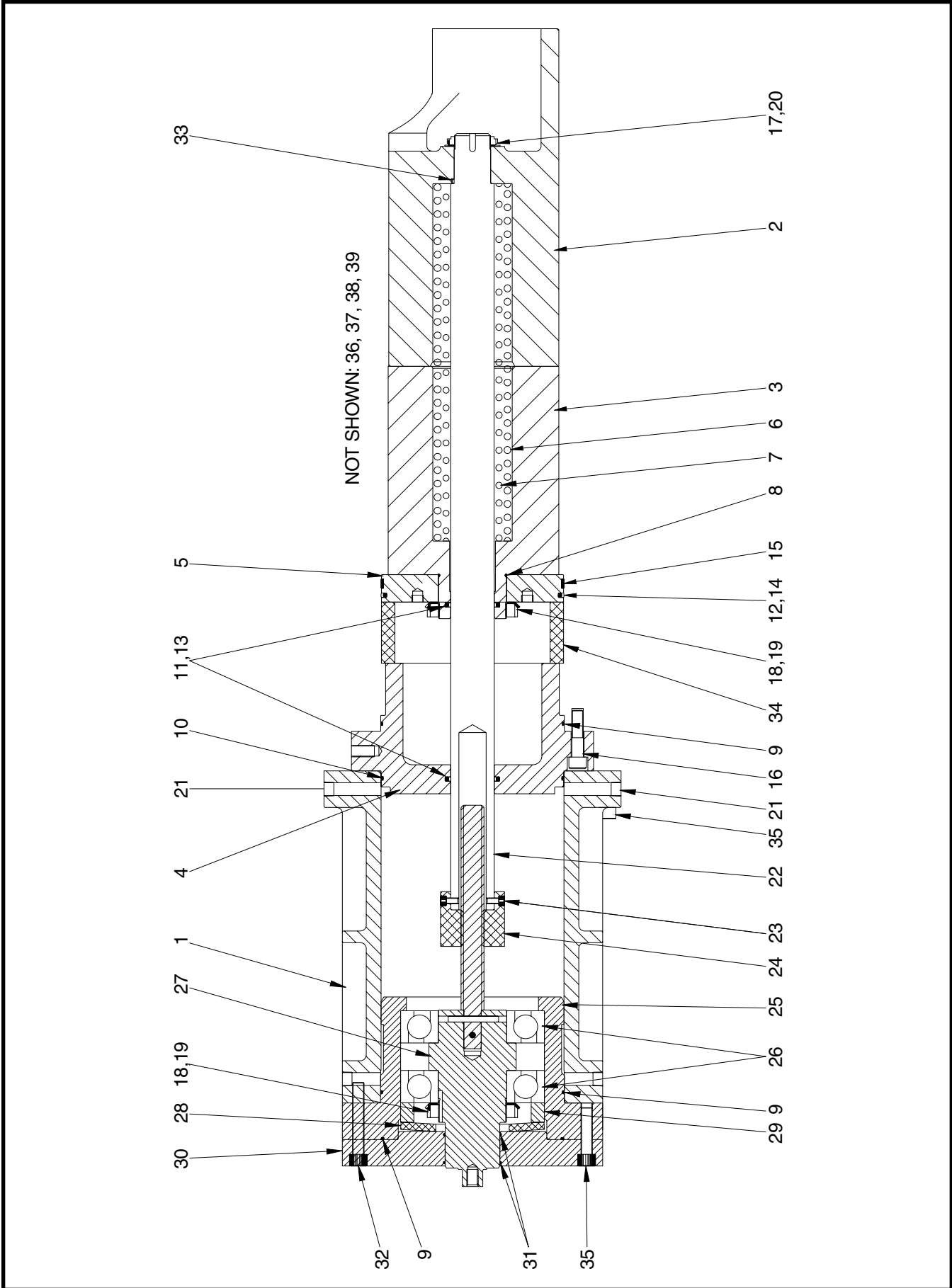


Figure 16. Slide Valve/Stop Assembly, Handwheel, 355.

| FIG. & INDEX | ITEM NUMBER | DESCRIPTION                                   | QTY. | REV. |
|--------------|-------------|---|------|------|
| 16—          | 534E0532    | TDSH 355 Slide Valve/Stop Assembly, Handwheel | Ref. | U    |
| —1           | 534E0175C01 | Cylinder                                      | 1    |      |
| —2           | 534D0429C01 | Valve, Slide, TDSH 355S                       | 1    |      |
|              | 534D0365C01 | Valve, Slide, TDSH 355L                       | 1    |      |
|              | 534D0859C01 | Valve, Slide, TDSH 355XL                      | 1    |      |
| —3           | 534D0430C01 | Stop, Slide, TDSH 355S                        | 1    |      |
|              | 534D0366C01 | Stop, Slide, TDSH 355L                        | 1    |      |
|              | 534D0861C01 | Stop, Slide, TDSH 355XL                       | 1    |      |
| —4           | 534D0373C01 | Cover, Slide Stop, TDSH 355S/L                | 1    |      |
|              | 534D0862C01 | Cover, Slide Stop, TDSH 355XL                 | 1    |      |
| —5           | 534D0431C01 | Piston, Slide Stop, TDSH 355S                 | 1    |      |
|              | 534D0367C01 | Piston, Slide Stop, TDSH 355L/XL              | 1    |      |
| —6           | 534B0249H01 | Spring, Unloader, TDSH 355S                   | 1    |      |
|              | 534B0240H01 | Spring, Unloader, TDSH 355L/XL                | 1    |      |
| —7           | 534B0250H01 | Spring, Unloader, TDSH 355S                   | 1    |      |
|              | 534B0242H01 | Spring, Unloader, TDSH 355L/XL                | 1    |      |
| —8           | 980A0012B04 | O-ring ■                                      | 1    |      |
| —9           | 980A0012H04 | O-ring ■                                      | 2    |      |
| —10          | 980A0012H03 | O-ring ■                                      | 2    |      |
| —11          | 980A0012H41 | O-ring ■                                      | 2    |      |
| —12          | 980A0012H81 | O-ring ■                                      | 1    |      |
| —13          | 534B0006H07 | Seal, Rod ■                                   | 2    |      |
| —14          | 534C0187H11 | Ring, Glyd ■                                  | 1    |      |
| —15          | 534C0510H01 | Ring, Slyd ■                                  | 1    |      |
| —16          | 111Q0740744 | Capscrew, Socket Head, M16 x 65mm             | 17   |      |
| —17          | 534A0226H04 | Locknut ■                                     | 1    |      |
| —18          | 534A0035H09 | Locknut                                       | 2    |      |
| —19          | 534B0125H09 | Lockwasher ■                                  | 2    |      |
| —20          | 534B0125H14 | Lockwasher ■                                  | 1    |      |
| —21          | 944A0008H04 | Plug, Pipe, 1/2-14 NPTF                       | 2    |      |
| —22          | 534D0933H01 | Spindle, TDSH 355S                            | 1    |      |
|              | 534D0927H01 | Spindle, TDSH 355L/XL                         | 1    |      |
| —23          | 333Q0000884 | Capscrew, Socket Head, M8 x 16mm              | 8    |      |
| —24          | 534C1056H01 | Nut, Special                                  | 1    |      |
| —25          | 534D0926C01 | Housing, Bearing                              | 1    |      |
| —26          | 534C1170H01 | Bearing, Angular Contact                      | 2    |      |
| —27          | 534C1071G01 | Assembly, Shaft                               | 1    |      |
| —28          | 534B0520H01 | Washer, Spring                                | 1    |      |
| —29          | 534B0521H01 | Spacer  | 1    |      |
| —30          | 534D0913C01 | Cover, Housing                                | 1    |      |
| —31          | 333Q0000801 | O-ring ■                                      | 2    |      |
| —32          | 111Q0740776 | Capscrew, Socket Head, M16 x 100mm            | 8    |      |
| —33          | 534A0037H02 | Pin, Antirotation                             | 1    |      |
| —34          | 534C0453H29 | Spacer, TDSH 355S                             | 1    |      |
|              | 534C0453H32 | Spacer, TDSH 355L                             | 1    |      |
|              | 534C0453H35 | Spacer, TDSH 355XL                            | 1    |      |
| —35          | 111Q0740774 | Capscrew, Socket Head, M16 x 120mm            | 10   |      |
|              |             | Not Shown:                                    |      |      |
| —36          | 581B0001H07 | Wheel, Hand                                   | 1    |      |
| —37          | 901A0046D01 | Bolt, Hex Head, 5/8-11 x 1"                   | 1    |      |
| —38          | 111Q0940055 | Washer  | 1    |      |
| —39          | 581A0011H04 | Washer, Spring                                | 1    |      |

■ Item included in O-ring and Gasket Kit. See page 39.

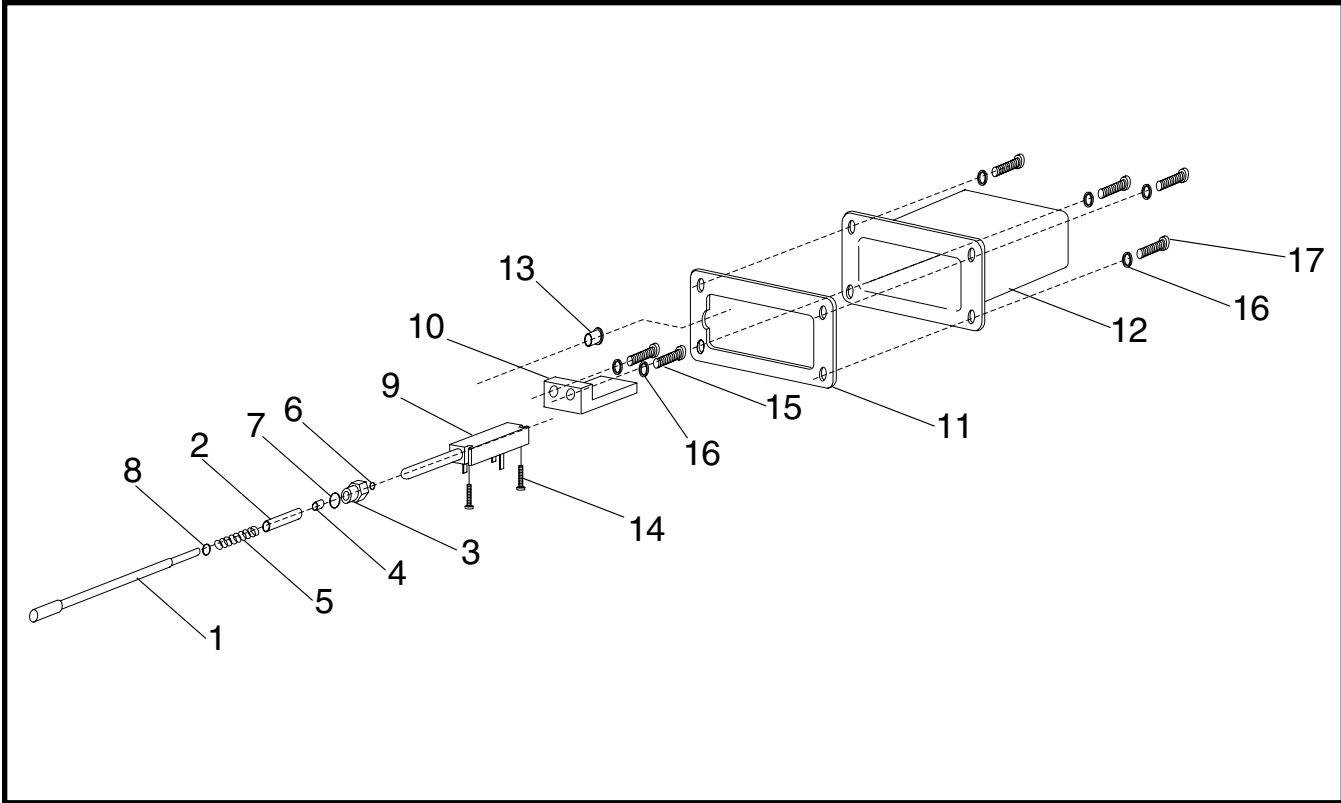


Figure 17. Slide Stop Indication Assembly, All Models.

| FIG. & INDEX | ITEM NUMBER | DESCRIPTION                            | QTY. | REV. |
|--------------|-------------|--|------|------|
| 17—          | —           | TDSB/TDSH 163—355 Slide Stop Indicator | Ref. |      |
| —1           | 534B0055G01 | Assembly, Indicator Rod, TDSH 163      | 1    |      |
|              | 534B0055G02 | Assembly, Indicator Rod, TDSH 193      | 1    |      |
|              | 534B0055G03 | Assembly, Indicator Rod, TDSH 233      | 1    |      |
|              | 534B0055G04 | Assembly, Indicator Rod, TDSH 283      | 1    |      |
|              | 534B0055G05 | Assembly, Indicator Rod, TDSH 355      | 1    |      |
| —2           | 534A0031H01 | Spacer                                 | 1    |      |
| —3           | 534A0034H01 | Plug, Seal                             | 1    |      |
| —4           | 534A0033H01 | Bearing ■                              | 1    |      |
| —5           | 534A0032H02 | Spring                                 | 1    |      |
| —6           | 980A0012A11 | O-ring ■                               | 1    |      |
| —7           | 980A0012K62 | O-ring ■                               | 1    |      |
| —8           | 534B0015H06 | Ring, Retaining ■                      | 1    |      |
|              | 534D0363G01 | Slide Stop Indication Mechanism        | Ref. |      |
| —9           | 534B0293H01 | Potentiometer*                         | 1    |      |
| —10          | 534B0283H01 | Support, Potentiometer*                | 1    |      |
| —11          | 534B0110H01 | Gasket ■                               | 1    |      |
| —12          | 534C0432C01 | Cover                                  | 1    |      |
| —13          | 534C0096H13 | Bushing                                | 1    |      |
| —14          | 111Q0740784 | Screw, Machine, #1-72 UNF x 1/2"*      | 2    |      |
| —15          | 901A0085H19 | Capscrew, Socket Head, M8 x 30mm*      | 2    |      |
| —16          | 534C0096H05 | Lockwasher, 8mm                        | 6    |      |
| —17          | 901A0085H04 | Capscrew, Socket Head, M8 x 20mm       | 4    |      |
| *            | 111Q0041148 | Slide Stop Potentiometer Kit           | 1    |      |

■ Item included in O-ring and Gasket Kit.



| <b>FRICK COMPRESSOR OILS</b> |                 |                  |                   |
|------------------------------|-----------------|------------------|-------------------|
| <b>Number</b>                | <b>5 Gallon</b> | <b>55 Gallon</b> | <b>330 Gallon</b> |
| 2A                           | 111Q0550019     | 111Q0550020      | 333Q0001866       |
| 3                            | 111Q0550001     | 111Q0550010      | 333Q0001861       |
| 4                            | —               | 111Q0550005      | —                 |
| 5                            | 111Q0550008     | 111Q0550009      | —                 |
| 6                            | 333Q0000940     | 333Q0000941      | —                 |
| 7                            | 111Q0550024     | 111Q0550025      | —                 |
| 9                            | 333Q0000850     | 333Q0000849      | 333Q0001862       |
| 9ST                          | 333Q0001905     | 333Q0001904      | —                 |
| 10                           | 333Q0000740     | 333Q0000739      | —                 |
| 11                           | 333Q0000852     | 333Q0000851      | 333Q0001863       |
| 11ST                         | 333Q0001907     | 333Q0001906      | —                 |
| 12                           | 333Q0001141     | 333Q0001142      | —                 |
| 12B                          | 333Q0001883     | 333Q0001884      | —                 |
| 13                           | 333Q0001253     | 333Q0001254      | —                 |
| 14                           | 333Q0001144     | 333Q0001145      | —                 |
| 18                           | —               | 333Q0001892      | —                 |
| 19                           | 333Q0001902     | 333Q0001903      | —                 |
| NG 1                         | —               | 333Q0001850      | —                 |
| NG 2                         | —               | 333Q0001851      | —                 |
| NG 3                         | —               | 333Q0001852      | —                 |

Oil Analysis Kit - 333Q0001853  
Tube of ODP Motor Grease - 333Q0001860

| <b>FRICK BLUE PAINT</b> |                    |
|-------------------------|--------------------|
| <b>Size Each</b>        | <b>Item Number</b> |
| 1 PT.                   | 993A0001H01*       |
| 1 GAL.                  | 333Q0000404        |
| 2 GAL.                  | 333Q0000724**      |

\* Spray Can

\*\* Matte finish epoxy paint. One gallon each of resin and cure that require mixing.

| <b>ADAPTERS - STRAIGHT THREAD TO NPTF</b> |                  |                          |               |
|---|------------------|--------------------------|---------------|
| <b>Straight Thread Size</b>               | <b>NPTF Size</b> | <b>Frick Part Number</b> | <b>O-Ring</b> |
| 9/16-18                                   | 1/4-18           | 944A0246H01              | 980A0012K60   |
| 3/4-16                                    | 1/4-18           | 944A0246H02              | 980A0012K62   |
| 3/4-16                                    | 3/8-18           | 944A0246H03              | 980A0012K62   |
| 3/4-16                                    | 1/2-14           | 944A0246H04              | 980A0012K62   |
| 7/8-14                                    | 1/4-18           | 944A0246H05              | 980A0012K64   |
| 7/8-14                                    | 3/8-18           | 944A0246H06              | 980A0012K64   |
| 7/8-14                                    | 1/2-14           | 944A0246H07              | 980A0012K64   |
| 7/8-14                                    | 3/4-14           | 944A0246H08              | 980A0012K64   |
| 1 1/16-12                                 | 1/2-14           | 944A0246H09              | 980A0012K66   |
| 1 1/16-12                                 | 3/4-14           | 944A0246H10              | 980A0012K66   |
| 1 3/16-12                                 | 1/2-14           | 944A0246H11              | 980A0012K68   |
| 1 3/16-12                                 | 3/4-14           | 944A0246H12              | 980A0012K68   |
| 1 5/16-12                                 | 1/2-14           | 944A0246H13              | 980A0012K69   |
| 1 5/16-12                                 | 3/4-14           | 944A0246H14              | 980A0012K69   |
| 1 5/16-12                                 | 1-11 1/2         | 944A0246H15              | 980A0012K69   |
| 1 5/8-12                                  | 1-11 1/2         | 944A0246H16              | 980A0012K71   |
| 1 5/8-12                                  | 1 1/4-11 1/2     | 944A0246H17              | 980A0012K71   |
| 1 7/8-12                                  | 1-11 1/2         | 944A0246H18              | 980A0012K72   |
| 1 7/8-12                                  | 1 1/2-11 1/2     | 944A0246H19              | 980A0012K72   |
| 7/16-20                                   | 1/4-18           | 944A0246H20              | 980A0012K58   |

1. Measurements in inches.

TDSH / GDSH / TDSB ROTARY SCREW COMPRESSORS  
NUMERICAL PARTS LIST



| ITEM NUMBER | FIG. & INDEX NO. | ITEM NUMBER | FIG. & INDEX NO. | ITEM NUMBER | FIG. & INDEX NO. |
|-------------|------------------|-------------|------------------|-------------|------------------|
| 111Q0010300 | 4—25             | 111Q0740768 | 8—17             | 534A0035H09 | 12—27            |
| 111Q0011833 | 1—27             | 111Q0740768 | 11—27            | 534A0035H09 | 15—28            |
| 111Q0451313 | 2—40             | 111Q0740768 | 15—26            | 534A0035H09 | 16—18            |
| 111Q0451313 | 5—40             | 111Q0740772 | 10—41            | 534A0035H13 | 13—62            |
| 111Q0451313 | 8—41             | 111Q0740772 | 13—48            | 534A0035H13 | 14—56            |
| 111Q0451313 | 11—39            | 111Q0740772 | 14—42            | 534A0035H14 | 10—52            |
| 111Q0451313 | 15—36            | 111Q0740774 | 10—40            | 534A0037H02 | 1—44             |
| 111Q0740253 | 10—38            | 111Q0740774 | 12—36            | 534A0037H02 | 3—17             |
| 111Q0740720 | 7—34             | 111Q0740774 | 15—24            | 534A0037H02 | 7—44             |
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