



Model: See list of affected models

Jul. 31, 2015

Serial #: See list of affected units

Product Bulletin # TDS-148

## BUW Manifold Guard Upgrade Kit Installation Instructions

### Affected Units (Model Numbers):

6020E-556, 6025E-556, 6025E-939, 6027E-556, 6027E-639, 6027E-773, 6027E-939, 6027AC-939

### Affected Units (Serial Numbers):

003, 004, 005, 009, 010, 011, 013, 030, 036, 041, 047, 049, 062, 071, 076, 092, 097, 111, 116, 116, 123, 123, 124, 132, 138, 139, 143, 144, 145, 146, 152, 160, 162, 163, 166, 166, 169, 173, 173, 175, 178, 187, 189, 190, 192, 193, 195, 197, 197, 203, 205, 210, 211, 213, 220, 225, 226, 228, 232, 233, 234, 235, 238, 239, 257, 265, 266, 268, 270, 278, 279, 281, 292, 295, 297, 299, 300, 304, 308, 315, 320, 322, 325, 333, 345, 350, 354, 359, 360, 362, 368, 370, 371, 374, 381, 391, 394, 395, 397, 404, 410, 414, 417, 419, 421, 424, 425, 427, 429, 432, 437, 438, 441, 445, 452, 455, 456, 457, 462, 463, 464, 466, 468, 469, 470, 473, 475, 476, 477, 478, 479, 480, 482, 483, 485, 486, 487, 488, 491, 492, 493, 494, 496, 497, 498, 502, 505, 506, 507, 508, 514, 516, 519, 520, 523, 526, 530, 532, 533, 538, 540, 541, 542, 543, 552, 553, 557, 562, 564, 565, 568, 571, 572, 573, 574, 584, 585, 591, 594, 598, 599, 601, 602, 603, 605, 608, 616, 617, 618, 619, 623, 627, 629, 630, 631, 634, 643, 647, 649, 654, 655, 658, 661, 664, 668, 670, 676, 680, 687, 688, 690, 694, 696, 700, 702, 706, 709, 711, 717, 730, 731, 738, 739, 740, 741, 742, 743, 744, 748, 749, 751, 752, 753, 755, 756, 759, 762, 763, 764, 765, 766, 768, 769, 772, 773, 777, 779, 780, 783, 785, 786, 788, 790, 792, 798, 799, 800, 806, 816, 818, 819, 821, 827, 830, 837, 840, 842, 843, 844, 846, 851, 854, 859, 865, 868, 869, 870, 872, 873, 875, 880, 885, 888, 889, 890, 893, 894, 896, 901, 902, 903, 904, 905, 906, 908, 910, 914, 919, 920, 921, 923, 924, 925, 928, 929, 932, 938, 939, 940, 941, 942, 945, 946, 951, 958, 966, 967, 968, 969, 971, 973, 977, 978, 979, 980, 981, 987, 993, 996, 998, 1000, 1008, 1009, 1010, 1014, 1017, 1018, 1031, 1038, 1039, 1042, 1045, 1047, 1048, 1049, 1050, 1052, 1060, 1061, 1062, 1069, 1070, 1071, 1072, 1073, 1074, 1075, 1079, 1080, 1081, 1091, 1092, 1093, 1094, 1095, 1096, 1098, 1099, 1100, 1101, 1102, 1103, 1107, 1108, 1109, 1112, 1113, 1122, 1128, 1129, 1131, 1142, 1153, 1160, 1162, 1163, 1178, 1179, 1181, 1182, 1184, 1188, 1190, 1194, 1200, 1204, 1235, 1242, 1248, 1262, 1270, 1273, 1279, 1321, 1331.

### Background

A newly designed manifold guard and swivel manifold for the backup wrench (BUW) for the 275T top drive is now available. This newly designed guard and manifold:

- reduces the total number of guard components,
- provides a more compact design and eliminates potential contact points with other rig components, and
- provides additional room and clearance for hoses and hose fittings.

## Procedure

1. Determine the type of stabbing bell installed in the backup wrench, see Figure 1:
  - Urethane stabbing bell
  - Steel stabbing bell

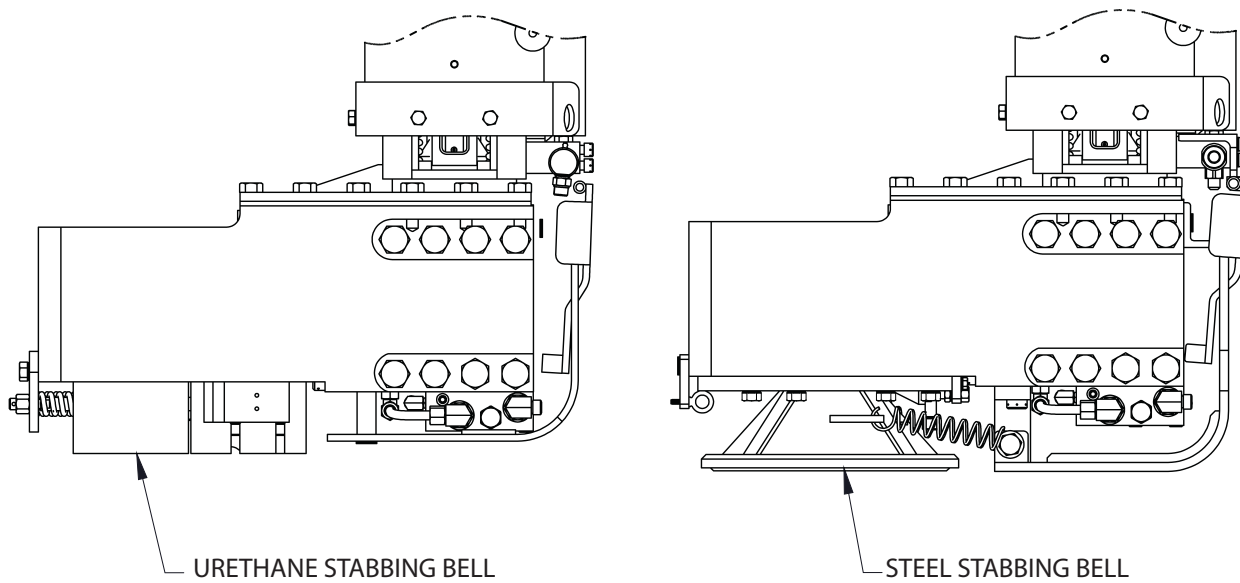


Figure 1: Urethane and Steel Stabbing Bell

2. For ordering and installation instructions, proceed accordingly to:
  - "Urethane Stabbing Bell" on page 3 or,
  - "Steel Stabbing Bell" on page 6.

## Urethane Stabbing Bell

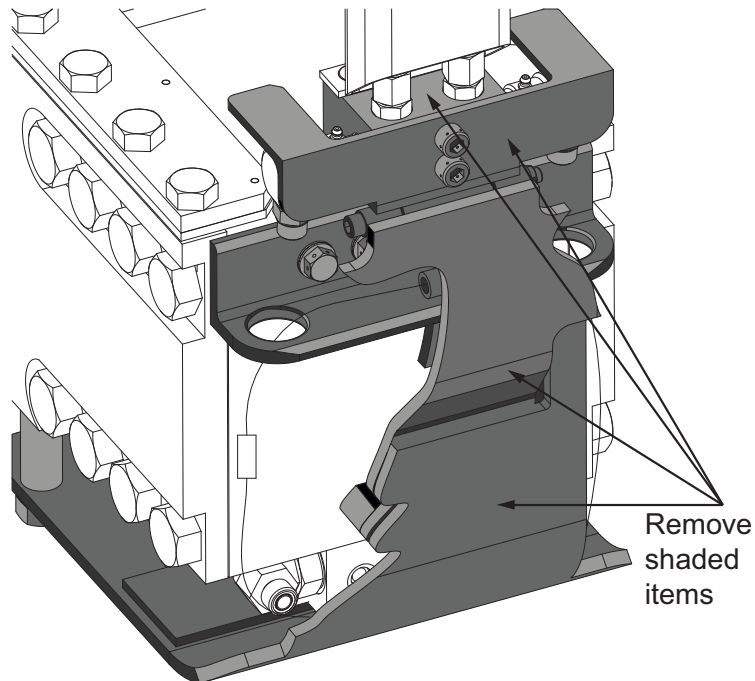


Figure 2: BUW Guard (Previous Version)

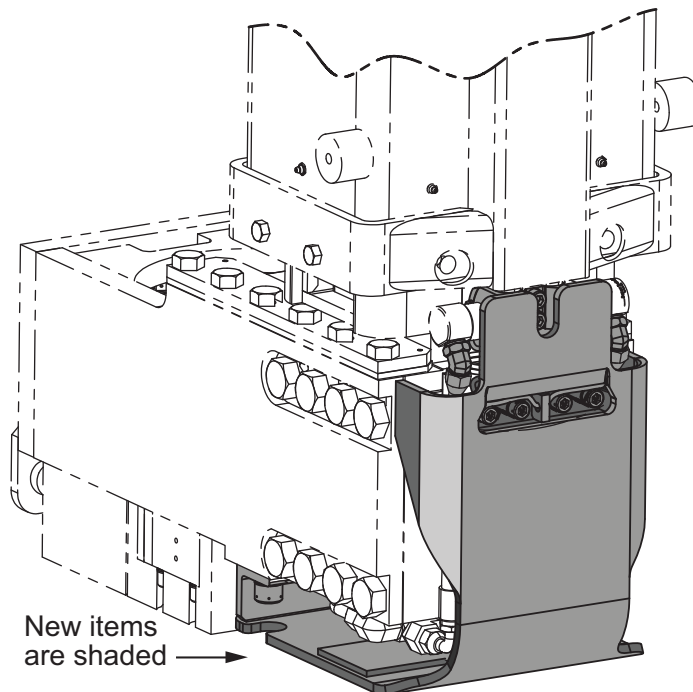


Figure 3: BUW Guard (New Version)

## Ordering Information

Customers that wish to replace the BUW guards should order the following parts:

**Table 1: Urethane Stabbing Bell Parts**

Item	Qty	Description	Part No.
1	1	GUARD, BUW, LOWER MANIFOLD	DT33951
2	1	SWIVEL MANIFOLD BACK-UP WRENCH	DT33960
3	2	ELL 45°, MALE 1/2 ORFS, MALE 1/2 ORB	H15-520320-08
4	2	CAPSCR, HEX SOC HD, 1/2-13UNC x 3.750, W	SH-0500NC-0375-W
5	4	CAPSCR, HEX SOC HD, 1/2-13UNC x 3.00, W	SH-0500NC-0300-W
6	4	LOCKWASHER, 1/2 NORD-LOCK	LW-0500-NL
7	2	CAPSCR, HEX SOC HD, 3/4-10UNC x 1.25, W	SH-0750NC-0125-W
8	2	LOCKWASHER, 3/4 NORD-LOCK SMALL	LW-0750-NLS
9	2FT	WIRE ROPE, 1/16" DIA	M21-2000-010
10	5	FERRULE, 1/16" DIA, ALUMINUM	M19-3006-010
11	5FT	WIRE ROPE, 3/16", 7X19, STAINLESS	M21-2001-010
12	2	FERRULE, 3/16, OVAL, ALUMINUM	M19-3007-010
13	2	CABLE TIE, 8.0 IN LG, 18 LB	E10499

## Installation Procedure

1. Remove the following original components from the BUW assembly (see Figure 2 on page 3):
  - a. GUARD, END RETAINER VALVE (661-35-0)
  - b. SWIVEL MANIFOLD GUARD (829-55-0)
  - c. DEFLECTOR PLATE (DT15393)
  - d. BUMPER (747-18-0)
  - e. SWIVEL MANIFOLD (829-51-0)
  - f. Associated fasteners to components listed above.

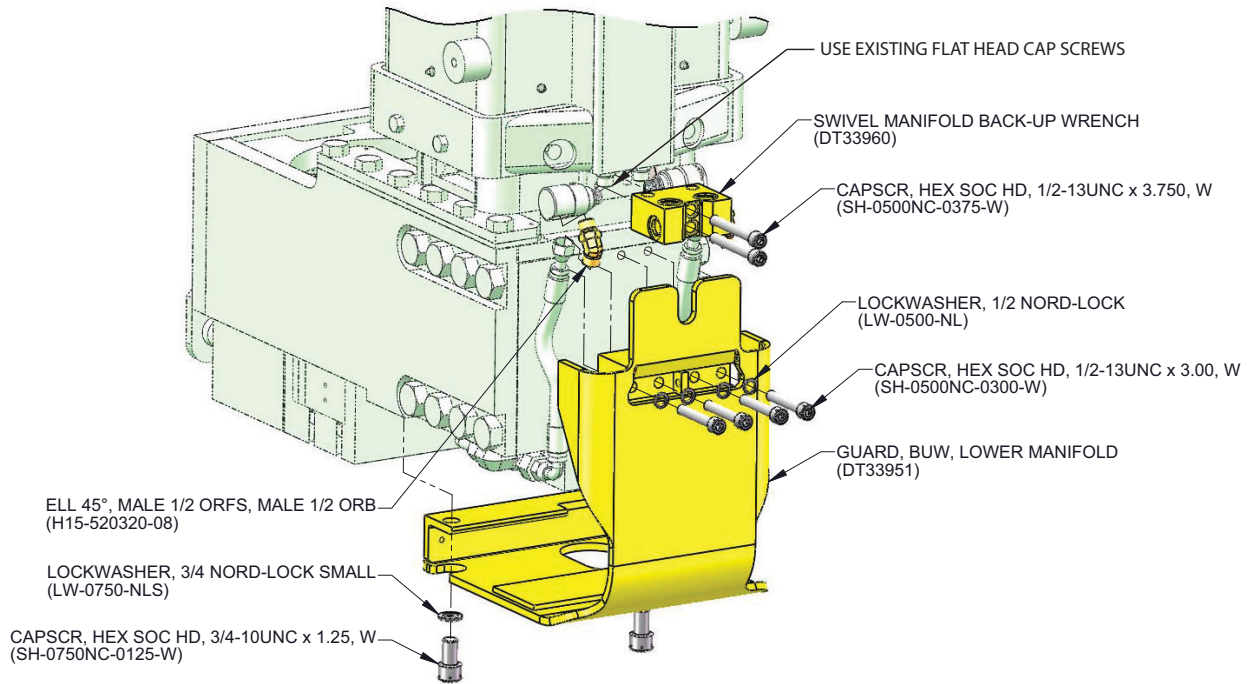


Figure 4: Assembly overview for new guard

2. Using the BOM components listed in Table 1 on page 4, reassemble the manifold guard and swivel manifold. Refer to Figure 4 above.
  - Use Loctite on all cap screws.
  - Torque fasteners as per Canrig Specification ENG 725 and safety wire per ENG 701.
3. Proceed to "Installing Guard Secondary Retention" on page 9 for safety wire detail.

## Steel Stabbing Bell

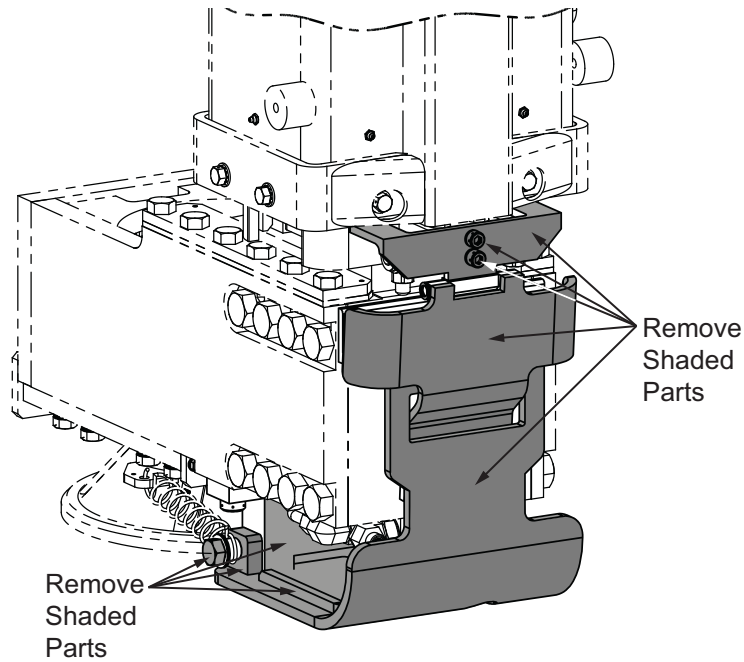


Figure 5: BUW Guard (Previous Version)

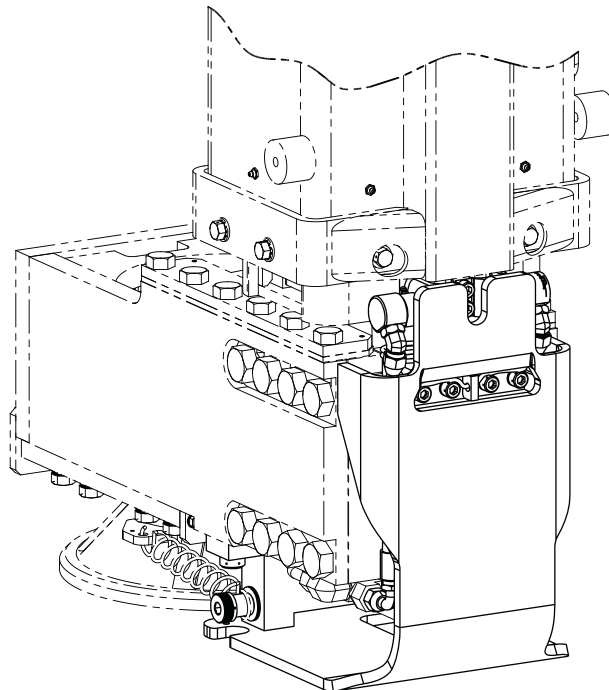


Figure 6: BUW Guard (New Version)

## Ordering Information

Customers that wish to replace the BUW guards should order the following parts:

**Table 2: Steel Stabbing Bell Parts**

Item	Qty	Description	Part No.
1	1	GUARD, BUW (STEEL STABBING BELL), LOWER MANIFOLD	DT22567
2	1	SWIVEL MANIFOLD BACK-UP WRENCH	DT33960
3	2	ELL 45°, MALE 1/2 ORFS, MALE 1/2 ORB	H15-520320-08
4	2	CAPSCR, HEX SOC HD, 1/2-13UNC x 3.750, W	SH-0500NC-0375-W
5	4	CAPSCR, HEX SOC HD, 1/2-13UNC x 3.00, W	SH-0500NC-0300-W
6	4	LOCKWASHER, 1/2 NORD-LOCK	LW-0500-NL
7	2	CAPSCR, HEX SOC HD, 3/4-10UNC x 1.25, W	SH-0750NC-0125-W
8	2	SCREW, SHOULDER, 3/4-10UNC X 1.25, W	DT22587
9	2	LOCKWASHER, 3/4, NORD-LOCK SMALL	LW-0750-NLS
10	2FT	WIRE ROPE, 1/16" DIA	M21-2000-010
11	5	FERRULE, 1/16" DIA, ALUMINUM	M19-3006-010
12	5FT	WIRE ROPE, 3/16, 7 X 19, STAINLESS	M21-2001-010
13	2	FERRULE, 3/16, OVAL, ALUMINUM	M19-3007-010
14	1	CABLE TIE, 8.0 IN LG, 18 LB	E10499

## Installation Procedure

1. Remove the following original components from the BUW assembly (see Figure 5 on page 6):
  - a. END RETAINER/VALVE GUARD (DT30431)
  - b. GUARD, SWIVEL MANIFOLD (DT30433)
  - c. PLATE, DEFLECTOR BUW VALVE GUARD (DT30432)
  - d. BUMPER, DEFLECTOR PLATE (DT30434)
  - e. SWIVEL MANIFOLD (829-51-0)
  - f. Associated fasteners to components listed above.

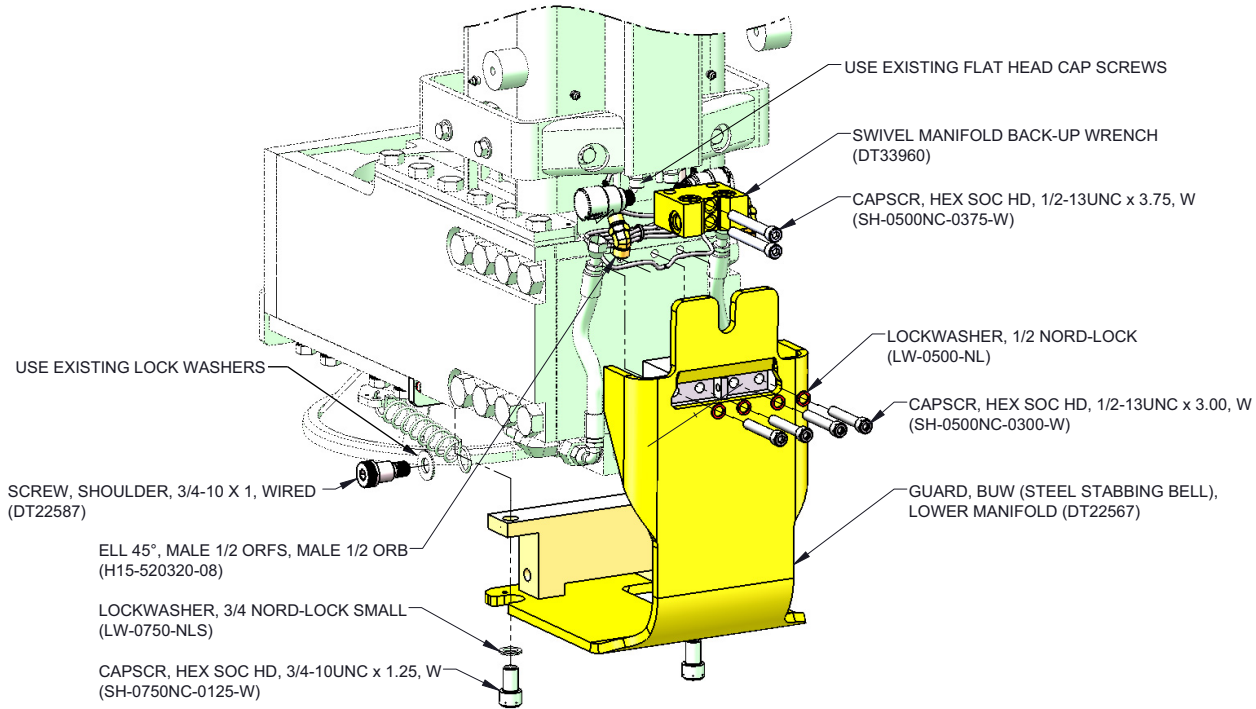


Figure 7: Steel stabbing bell, assembly overview for new guard

2. Using the BOM components listed in Table 2 on page 7, reassemble the manifold guard and swivel manifold. See Figure 7.
  - Use Loctite on all capscrews.
  - Torque fasteners per Canrig Specification ENG 725 and safety wire per ENG 701.
3. Proceed to "Installing Guard Secondary Retention" on page 9 for safety wire detail.



## Installing Guard Secondary Retention

1. Route 3/16" wire rope (M21-2001-010) over the top of the swivel manifold and behind the hose fittings.
2. Cross wire rope.
3. Continue to route the wire rope through the guard.
4. Leave an extra 24" of slack and secure the wire rope loop with 2x 3/16" ferrule. (M19-3007-010)
5. Coil the wire rope and secure in the middle of the coil with an 8" cable tie that has an 18 lb breaking strength, (E10499).

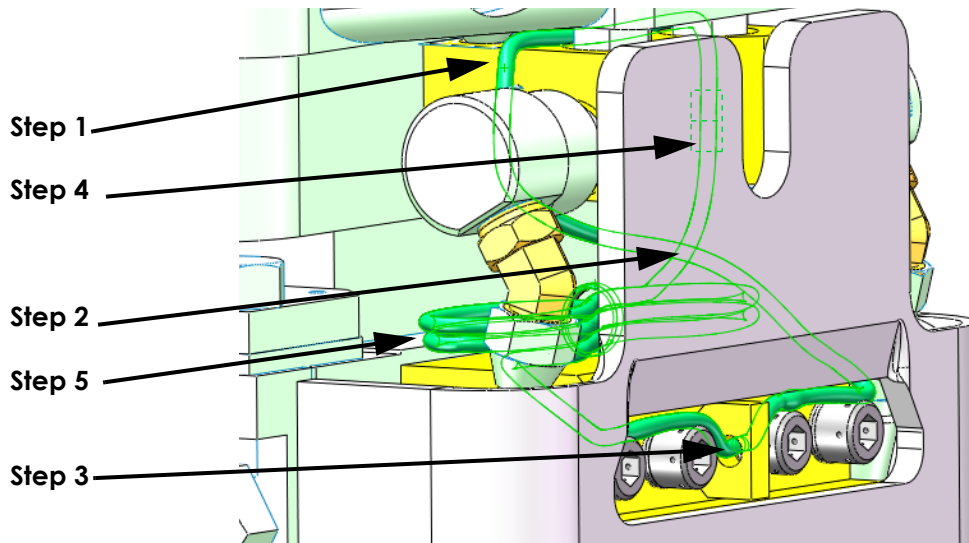


Figure 8: New guard, isometric view of secondary retention

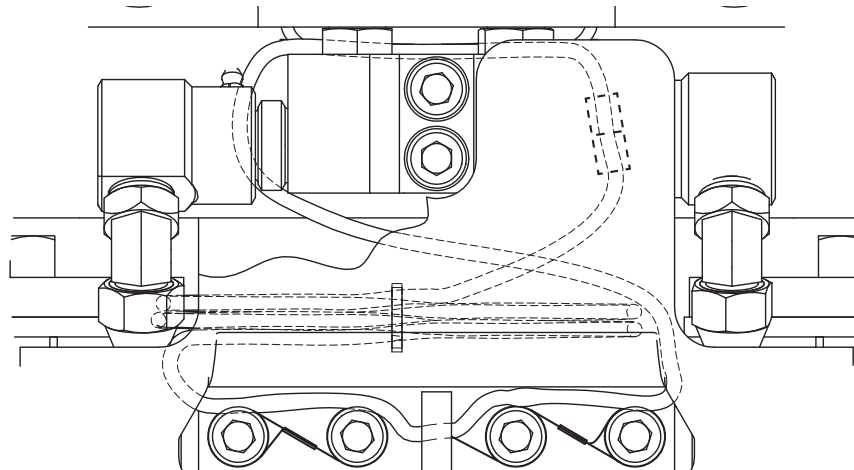


Figure 9: Secondary retention, detail view