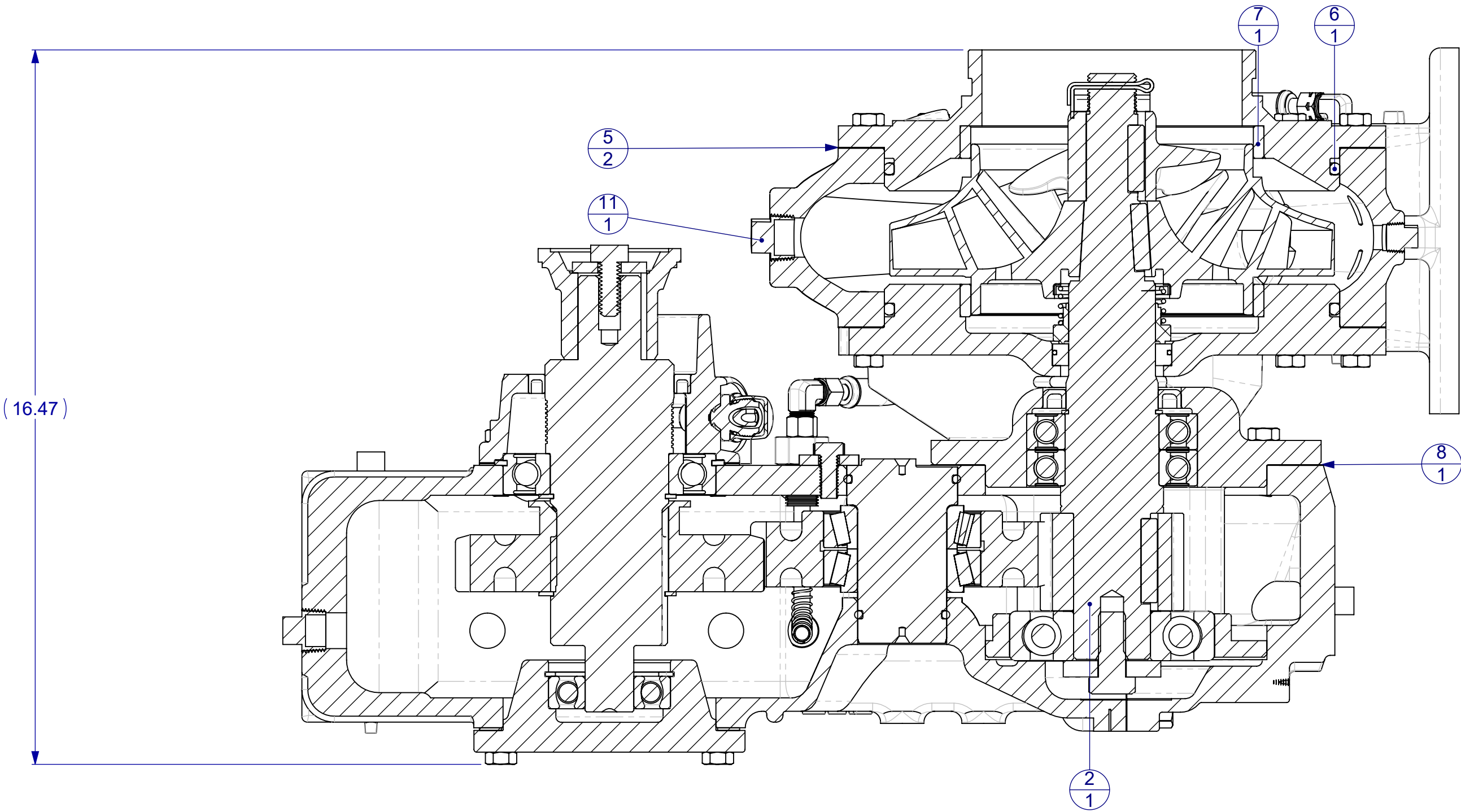


HALE TYPE DSD SIDE KICK™
PUMP ASSEMBLY

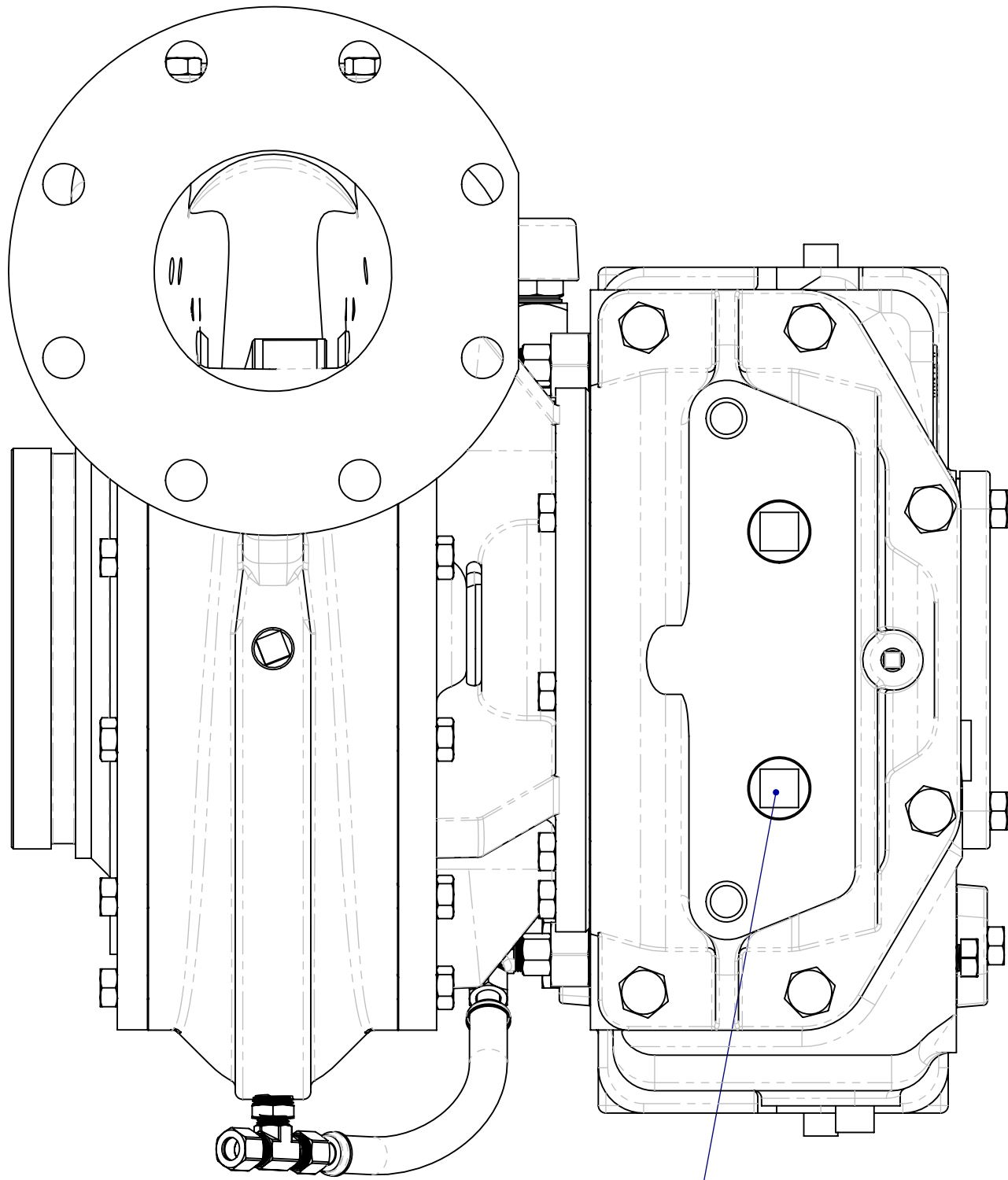
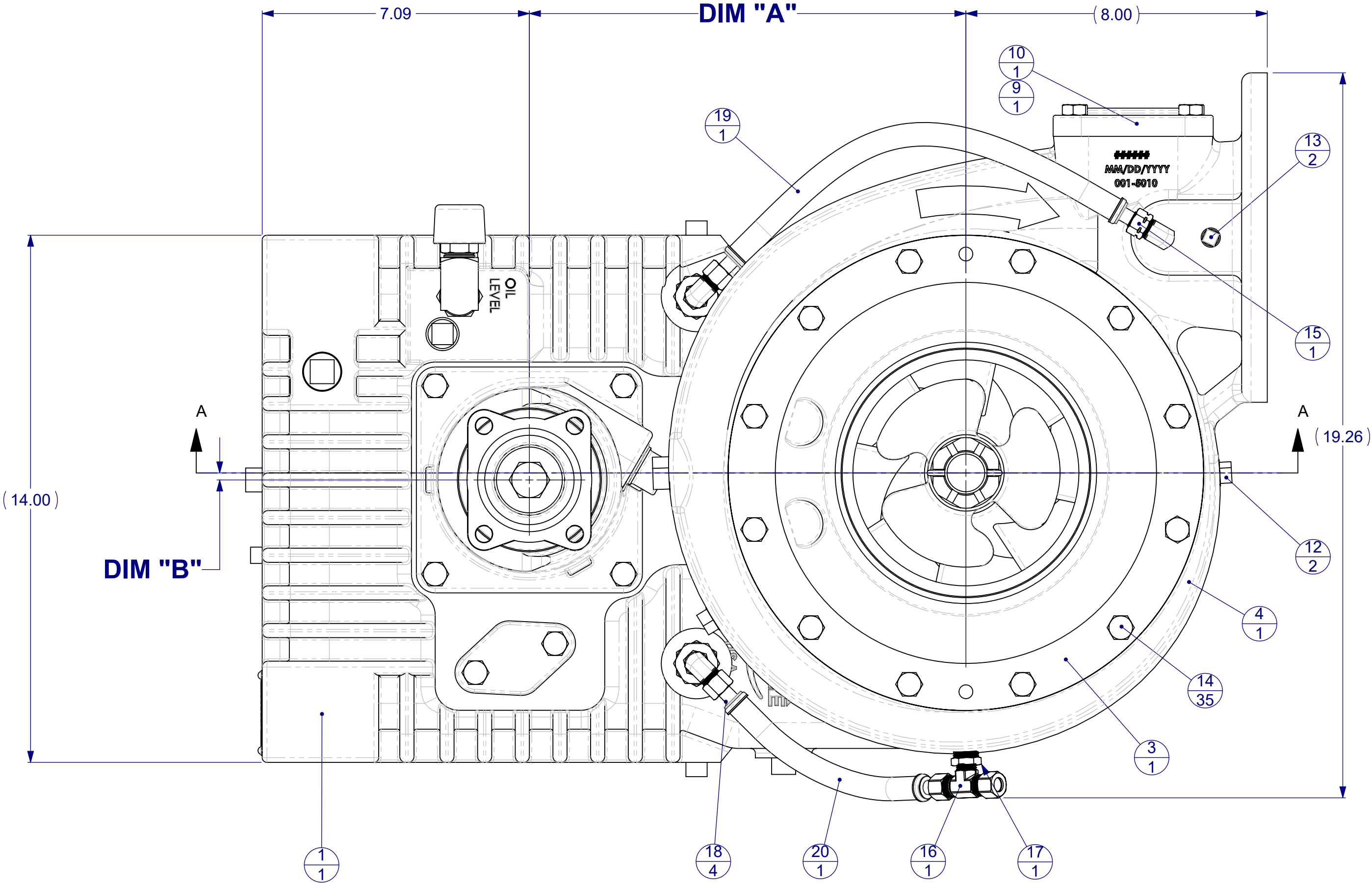
NOTES:

1. SEE LIMIT CHART, HALE DOCUMENT F-72 FOR MAXIMUM ALLOWABLE PUMP PRESSURE, ENGINE HORSEPOWER AND TORQUE LIMITS FOR HALE CENTRIFUGAL PUMPS.
2. APPLY LOCTITE #243 HIGH TEMPERATURE THREAD LOCKER OR EQUIVALENT TO SCREW THREADS AND TORQUE SCREWS PER HALE ENGINEERING STANDARD ES018-0020.
3. UNLESS OTHERWISE INDICATED FASTENERS ARE GRADE 5 ZINC PLATED STEEL.
4. CAUTION: ALL FASTENERS ON THIS UNIT HAVE BEEN SELECTED PER THEIR APPLICATION. HALE PRODUCTS DOES NOT RECOMMEND REPLACING FASTENERS WITH ANYTHING OTHER THAN HALE PART NUMBERS PROVIDED. REPLACING WITH A WEAKER ALTERNATIVE POSES A SAFETY RISK.
5. REFER TO PL1153 FOR PROPER INSTALLATION OF OFFSET REAR BEARING HOUSING. REFER TO PL789 FOR STANDARD DSD PUMP ASSEMBLY.

DIMENSION TABLE			
PART NUMBER (1000/1250/1500 GPM)	PUMP MODEL	MAX/MIN DIM "A"	MAX/MIN DIM. "B"
501-00015-000	DSD-15S	12.24"	-0.19"
501-00015-001	DSD-17S	12.07"	-0.09"
501-00015-002	DSD-19S	11.91"	0.00"
501-00015-003	DSD-21S	11.75"	0.09"
501-00015-004	DSD-23S	11.59"	0.19"



SECTION A-A

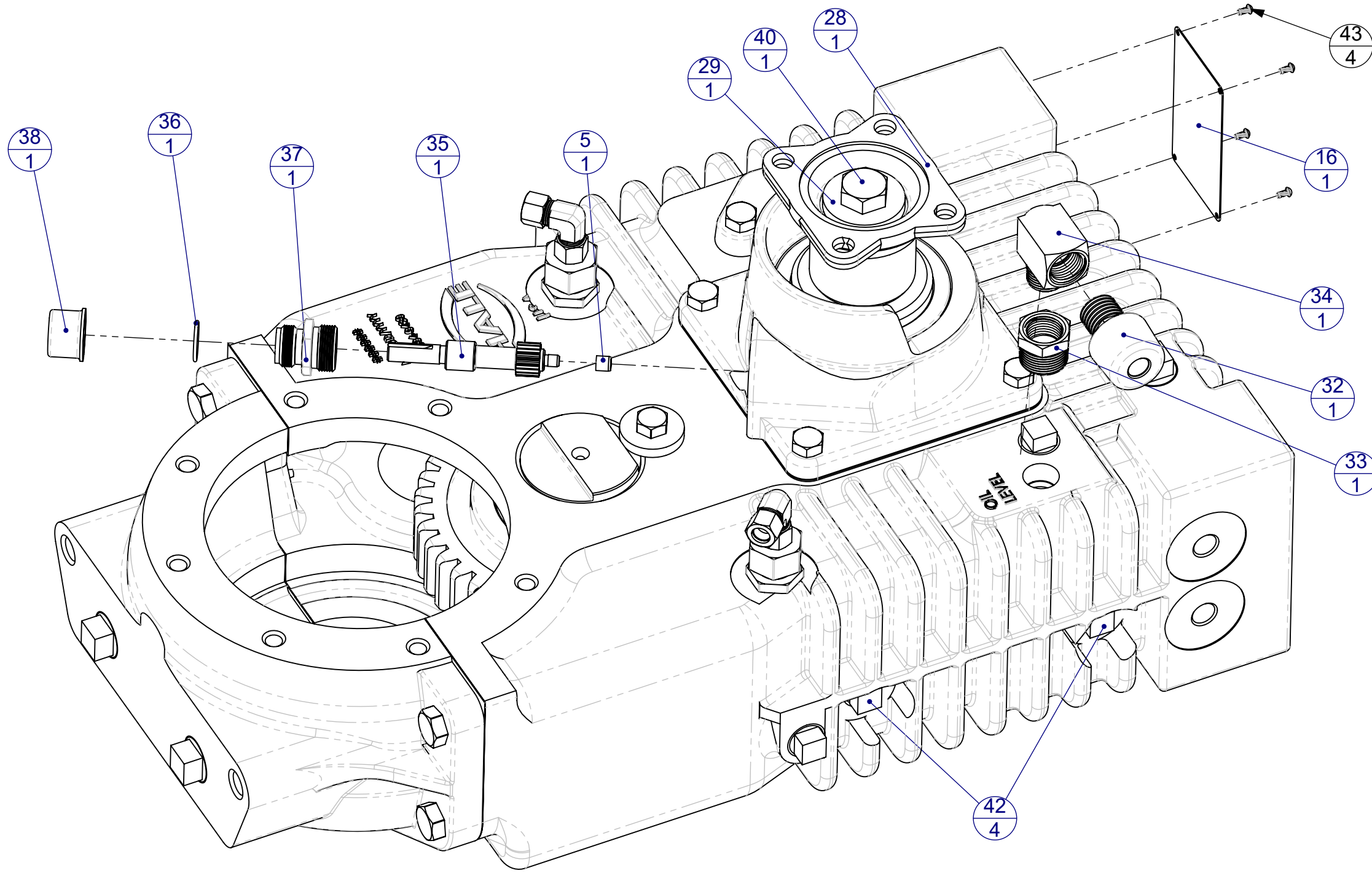
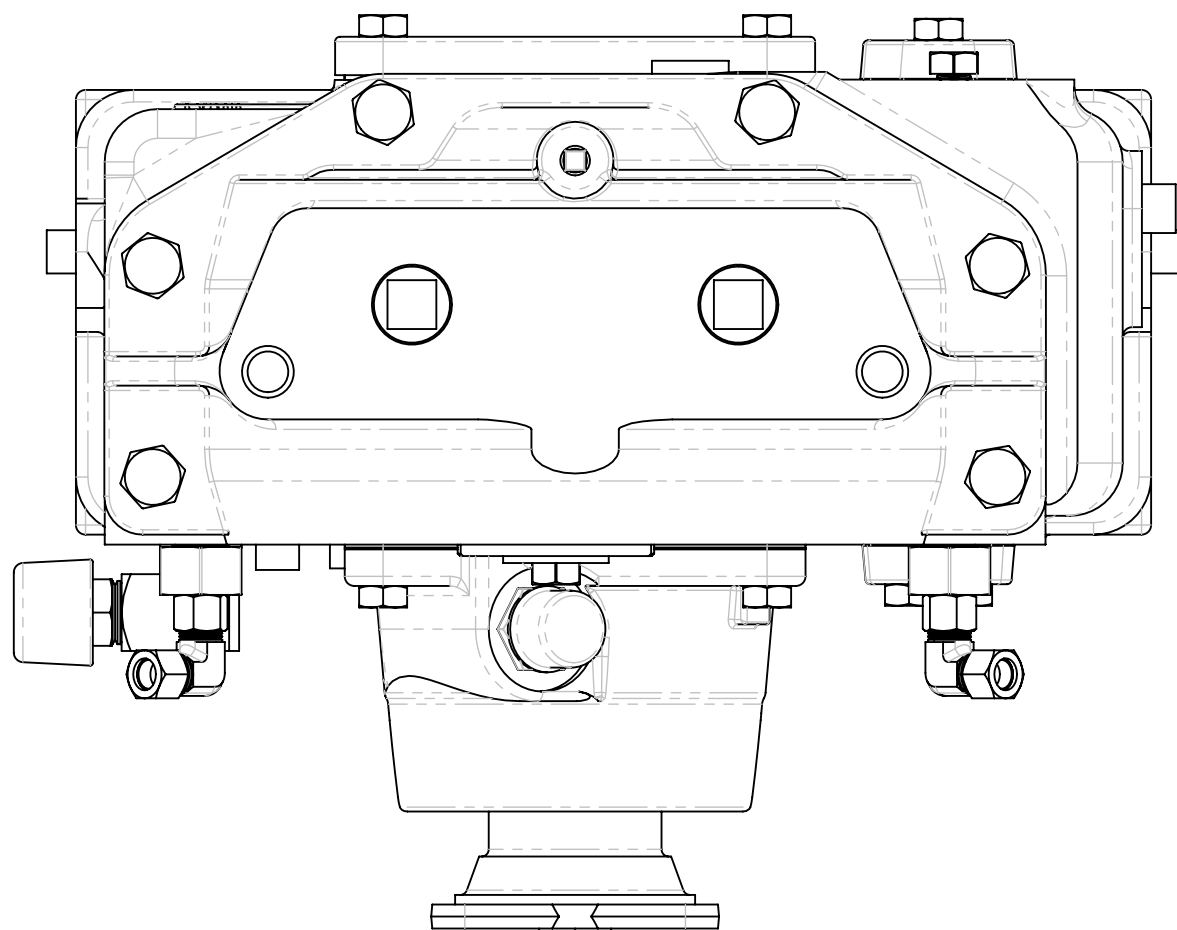


HALE TYPE DSD SIDE KICK™
FSG-PL-01301

ITEM	PART	DESCRIPTION	QTY	COMMENTS
1	504-00015-000	SG GEARBOX ASSEMBLY	1	SEE SHEET 2
2	IMPELLER ASSEMBLY	IMPELLER ASSEMBLY, DSD	1	SEE SHEET 2
3	002-5401-00-0	SUCTION HEAD 6IN VICT	1	
4	001-5132-00-0	BODY, VOLUTE, DSD/RSD	1	
5	046-1640-00-0	GASKET	2	
6	040-4490-00-0	O-RING, Ø9.975 X 0.275"	1	
7	321-0040-00-0	CLEARANCE RING	1	
8	046-6020-00-0	GASKET, CIR-W263	1	
9	142-0390-00-0	O-RING SEAL SQUARE CUT	1	
10	115-0050-00-0	115-B FLANGE-BLANK	1	
11	217-0501-00-0	PLUG-3/4 NPT M.I.	1	
12	217-0301-00-0	PLUG-3/8 NPT SQUARE HEAD	2	
13	217-0201-00-0	1/4 NPT SQUARE HEAD STEEL PLUG	2	
14	018-1812-25-0	SCREW, 7/16-14 X 1.25, GR8	35	
15	082-0203-02-0	ELBOW 1/4 NPT x 3/8 COMPRESSION - 90°	1	
16	082-0333-02-0	TEE, 3/8 COMP X 1/4 MNPT	1	
17	082-0302-02-0	BUSHING 3/8 X 1/4 NPT BRASS HEX	1	
18	082-3028-00-0	FITTING 3/8 HOSE BARB x 3/8 TUBE	4	
19	340-0490-00-0	BRAIDED HOSE	1	CUT TO FIT
20	340-0490-00-0	BRAIDED HOSE	1	CUT TO FIT

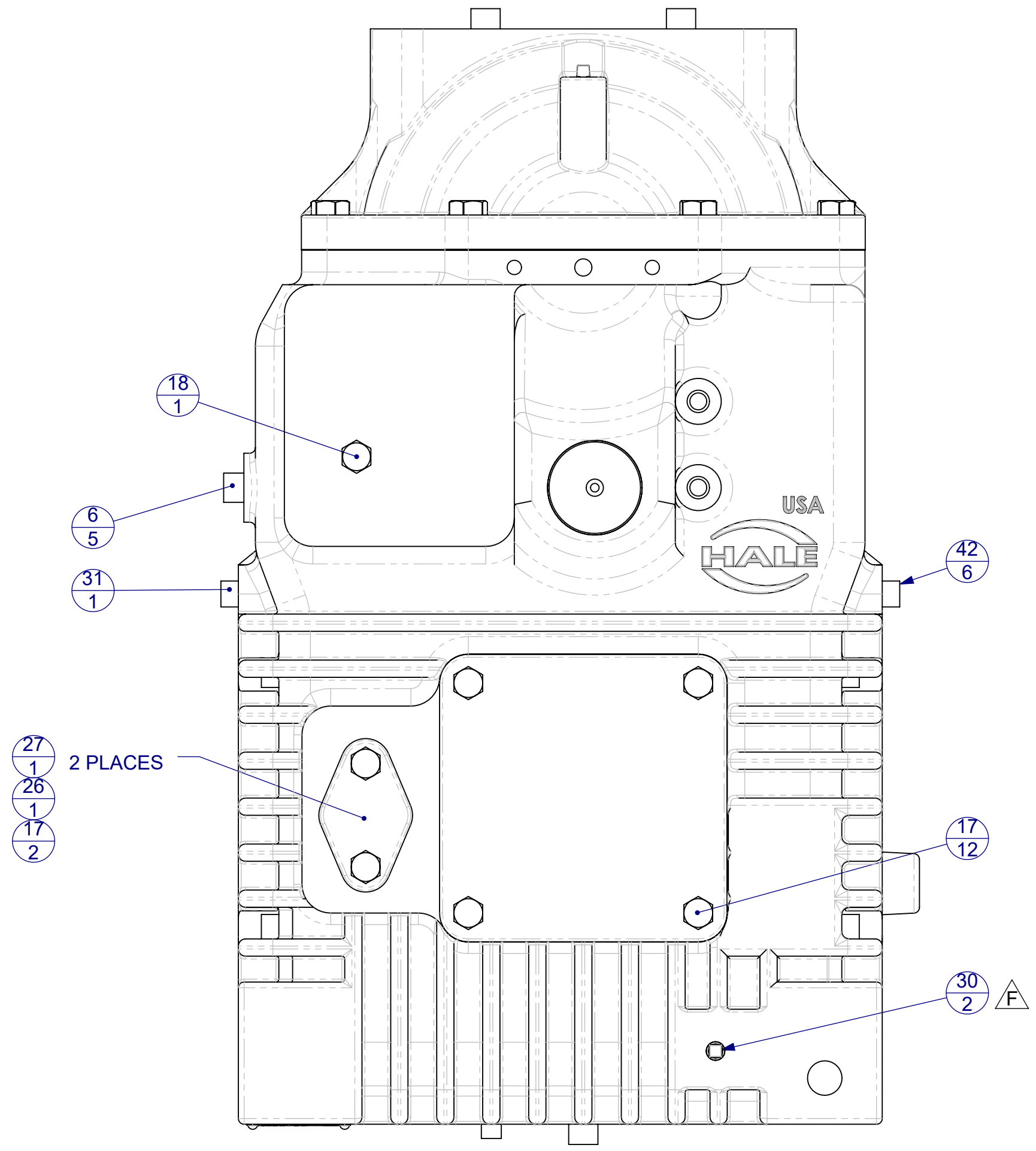
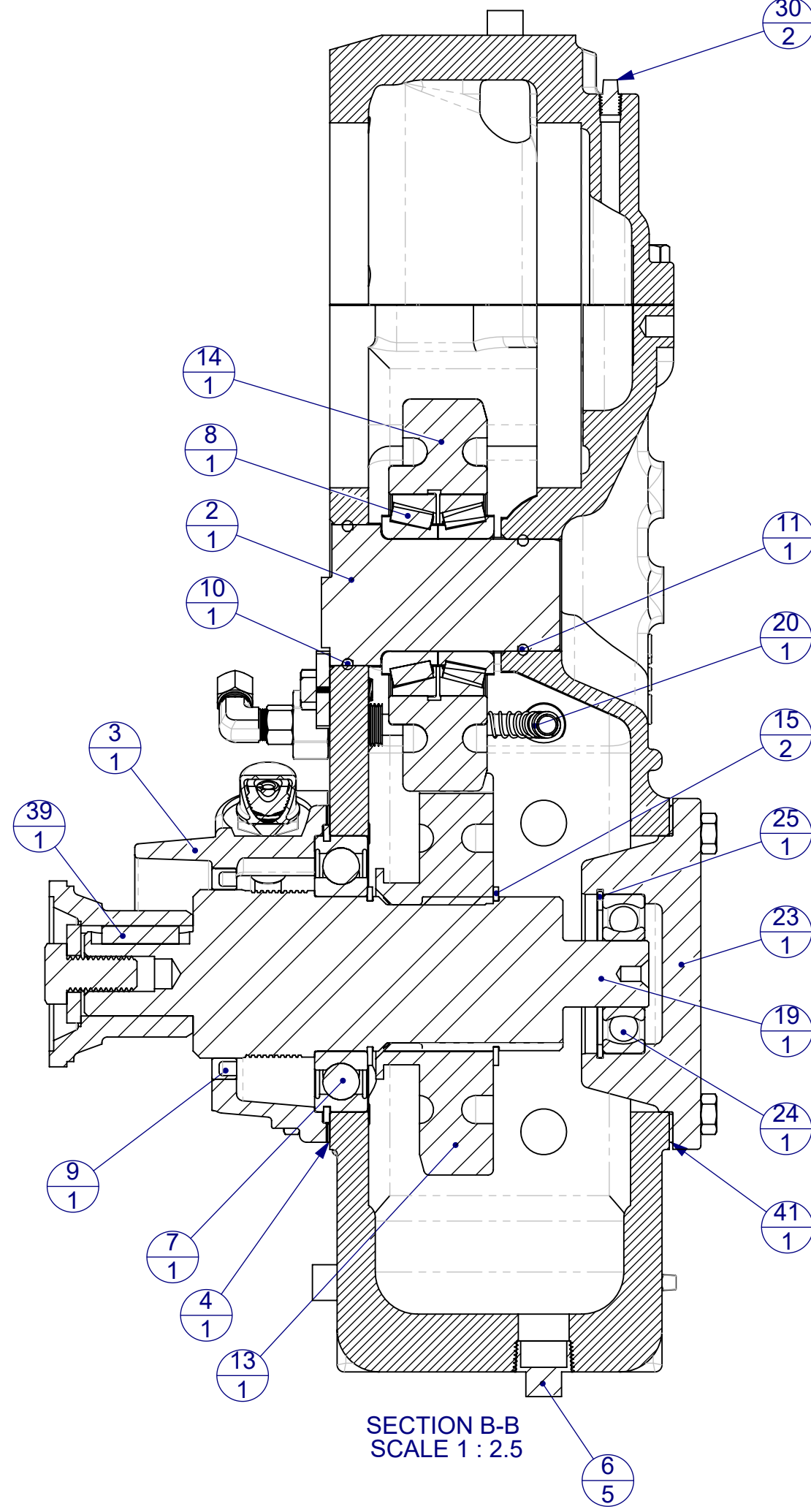
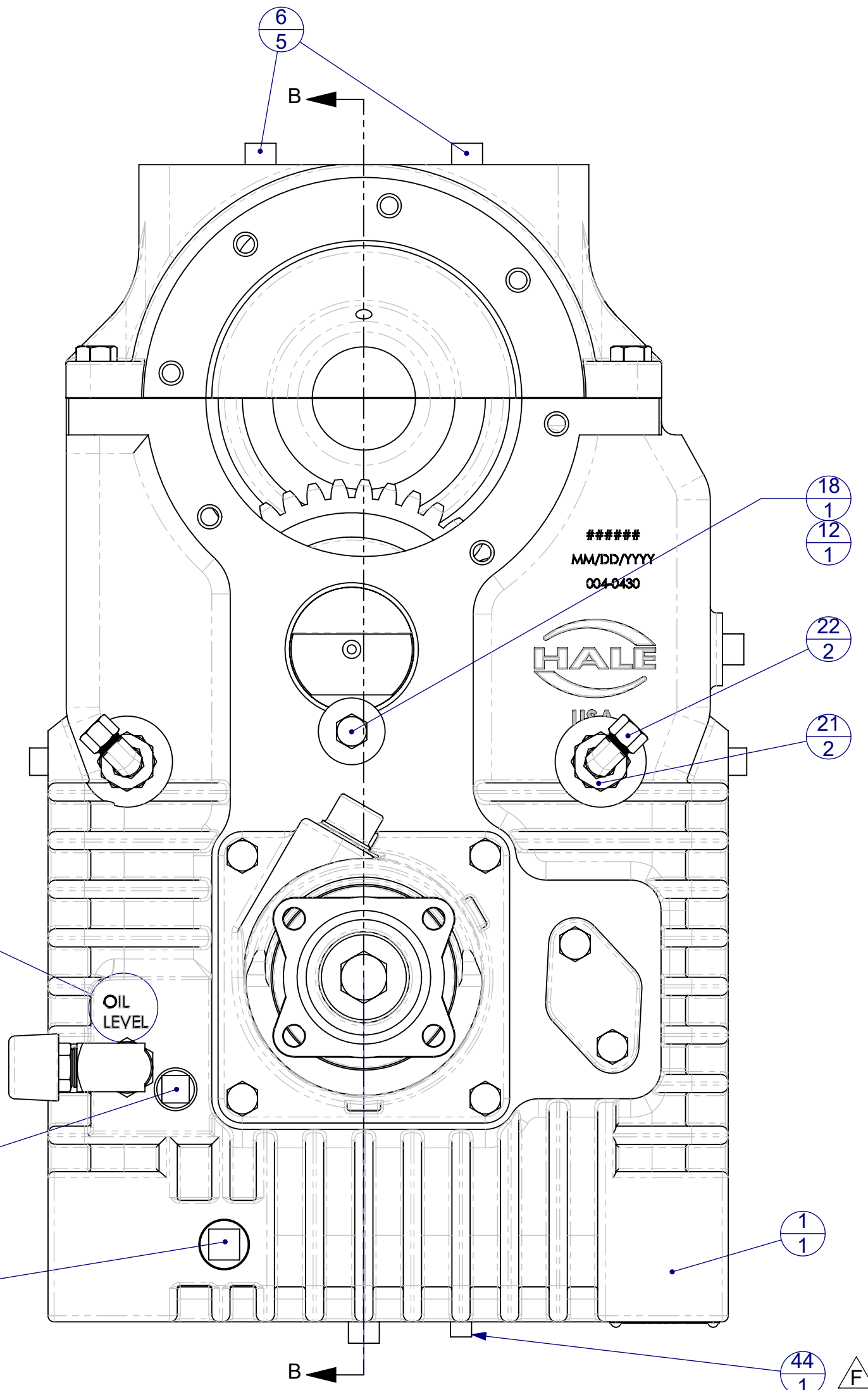
REVISIONS					UNLESS OTHERWISE SPECIFIED		THIRD ANGLE PROJECTION		CAGE #		COMPLETED		DRAWN		APPROVED		PROJECT / FIRST USED ON		DRAWING NUMBER		REV	
ECN	REV.	CHANGED FROM	BY	DATE	APVD	1. ALL dimensions are in inches	2. Unless drawing title indicates otherwise, all dimensions are in inches	3. All dimensions are in inches	4. All dimensions are in inches	5. All dimensions are in inches	6. All dimensions are in inches	7. All dimensions are in inches	8. All dimensions are in inches	9. All dimensions are in inches	10. All dimensions are in inches	11. All dimensions are in inches	12. All dimensions are in inches	13. All dimensions are in inches	14. All dimensions are in inches	15. All dimensions are in inches	16. All dimensions are in inches	17. All dimensions are in inches
3790	D	SEE SHEET 2	BMP	13SEP2016	AKG	19. All dimensions are in inches	20. All dimensions are in inches	21. All dimensions are in inches	22. All dimensions are in inches	23. All dimensions are in inches	24. All dimensions are in inches	25. All dimensions are in inches	26. All dimensions are in inches	27. All dimensions are in inches	28. All dimensions are in inches	29. All dimensions are in inches	30. All dimensions are in inches	31. All dimensions are in inches	32. All dimensions are in inches	33. All dimensions are in inches	34. All dimensions are in inches	35. All dimensions are in inches
4001	F	ADDED TM TO SIDE KICK	DMB	04APR2017	KTN	36. All dimensions are in inches	37. All dimensions are in inches	38. All dimensions are in inches	39. All dimensions are in inches	40. All dimensions are in inches	41. All dimensions are in inches	42. All dimensions are in inches	43. All dimensions are in inches	44. All dimensions are in inches	45. All dimensions are in inches	46. All dimensions are in inches	47. All dimensions are in inches	48. All dimensions are in inches	49. All dimensions are in inches	50. All dimensions are in inches	51. All dimensions are in inches	52. All dimensions are in inches
5427	F	ROTATED PUMP ON SHEET 1 TO REFLECT ACTUAL BUILD, ADDED NEW PORTS & PLUGS	KTN	11MAY2021	TAM	53. All dimensions are in inches	54. All dimensions are in inches	55. All dimensions are in inches	56. All dimensions are in inches	57. All dimensions are in inches	58. All dimensions are in inches	59. All dimensions are in inches	60. All dimensions are in inches	61. All dimensions are in inches	62. All dimensions are in inches	63. All dimensions are in inches	64. All dimensions are in inches	65. All dimensions are in inches	66. All dimensions are in inches	67. All dimensions are in inches	68. All dimensions are in inches	69. All dimensions are in inches

HALE TYPE DSD SIDE KICK™
PUMP ASSEMBLY



ISOMETRIC VIEW: FOR REFERENCE ONLY

ITEM NO.	PART NUMBER	DESCRIPTION	Default/QTY.
1	504-0380-01-0	DRIVE UNIT HOUSING	1
2	037-1530-00-0	G INTERMEDIATE SHAFT	1
3	008-0571-00-0	FRONT BEARING CAP	1
4	046-5130-01-0	GEARBOX BEARING COVER GASKET	1
5	048-0070-00-0	ZSF-118 SPEEDCOUNTER BUSHING	1
6	217-0501-00-0	PLUG-3/4 NPT M.I.	5
7	250-0214-06-0	214KG BEARING	1
8	250-8040-00-0	G INTERMEDIATE TAPER BEARING	1
9	296-2540-00-0	QHD OIL SEAL	1
10	040-2280-00-0	SHAFT SEAL RING	1
11	040-2240-00-0	SEAL RING	1
12	097-1330-00-0	WASHER, G INTERMED. SHAFT	1
13	031-0970-00-0	SLIDING GEAR	1
14	031-1040-00-0	INTERMEDIATE GEAR	1
15	077-2750-01-0	5100-275 RETAINING RING	2
16	101-0082-00-0	SERIAL NUMBER PLATE	1
17	018-1812-25-0	SCREW, 7/16-14 X 1.25, GR8	12
18	018-1810-25-0	SCREW, 7/16-14 x 1, GRADE 8	2
19	037-1610-00-0	SHAFT, GEARBOX	1
20	007-00018-000	TUBE, GEARBOX COOLING	1
21	082-0557-02-0	FITTING 3/4MPT X 3/8CMPSRN SPCL	2
22	082-0318-02-0	ELBOW, 3/8 COMP X 3/8 COMP, 90 DEG	2
23	044-1120-00-0	BEARING COVER	1
24	250-0306-20-0	306W BEARING	1
25	077-2810-00-0	RETAINING RING	1
26	046-5060-00-0	GASKET QL-W429	2
27	115-0091-01-0	GEARSHIFT SHAFT FLANGE	2
28	115-1510-00-0	HG COMPANION FLANGE	1
29	097-0890-03-0	IMPELLER WASHER	1
30	217-0101-00-0	PLUG - 1/8 NPT M.I. SQ	2
31	217-0401-08-0	PLUG-1/2 NPT M.I. MAGNETIC	1
32	044-0310-00-0	AIR VENT	1
33	082-0509-02-0	BUSHING - 3/4" MNPT X 1/2" FNPT BRASS	1
34	082-0413-02-0	ELBOW, 1/2 FNPT X 1/2 FNPT	1
35	031-0170-00-0	ZSF-204 S'COUNTER DRIVE GEAR	1
36	040-0180-00-0	O-RING	1
37	007-0040-00-0	ZSF-425 SPEEDCOUNTER ADAPTER	1
38	008-0070-00-0	SPEEDOMETER DUST CAP	1
39	017-0330-00-0	KEY	1
40	018-2412-25-0	SCREW-5/8-11 X 1-1/4, G8	1
41	046-5130-00-0	GEARBOX BEARING COVER GASKET	1
42	217-0401-00-0	PLUG, SQU, 1/2 NPT	6
43	018-5002-00-0	SCREW #4 X 1/4 UNC PLATED	4
44	217-0301-00-0	PLUG-3/8 NPT SQUARE HEAD	1



504-00015-000: SG GEARBOX; DSD SIDE KICK™
FSG-PL-01301

ECN	REV.	CHANGED FROM	BY	DATE	APVD	REVISIONS	COMPLETED	DRAWN	APPROVED	PROJECT / FIRST USED ON	REV
3790	D	ADDED ITEM 43 (#4-40 SCREWS); ITEM 39 WAS 017-0300-02-0	BMP	13SEP2016	KTN	ADDED TM TO SIDE KICK	09/16/2016	JPS	20P	DSD SIDE KICK™	F
4001	E	ADDED TM TO SIDE KICK	DMB	04APR2017	AJG	ROTATED PUMP ON SHEET 1 TO REFLECT ACTUAL BUILD, ADDED NEW PORTS & PLUGS	11MAY2021	TAM		FSG-PL-01301	F
5427	F	ROTATED PUMP ON SHEET 1 TO REFLECT ACTUAL BUILD, ADDED NEW PORTS & PLUGS	KTN	11MAY2021	TAM						F

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ECN	REV.	CHANGED FROM	BY	DATE	APVD
3790	D	SEE SHEET 2	BMP	13SEP2016	AUG
4001	E	ADDED TM TO SIDE KICK	DMB	04APR2017	KTN
5427	F	ROTATED PUMP ON SHEET 1 TO REFLECT ACTUAL BUILD, ADDED NEW PORTS & PLUGS	KTN	11MAY2021	TAM