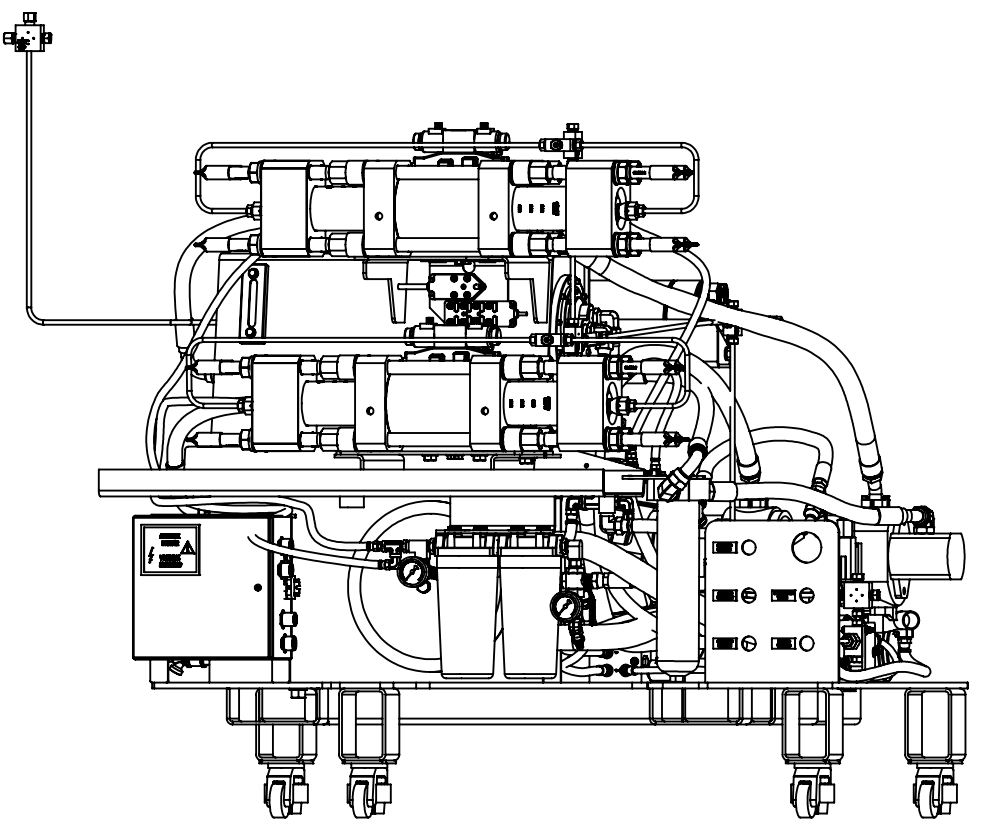



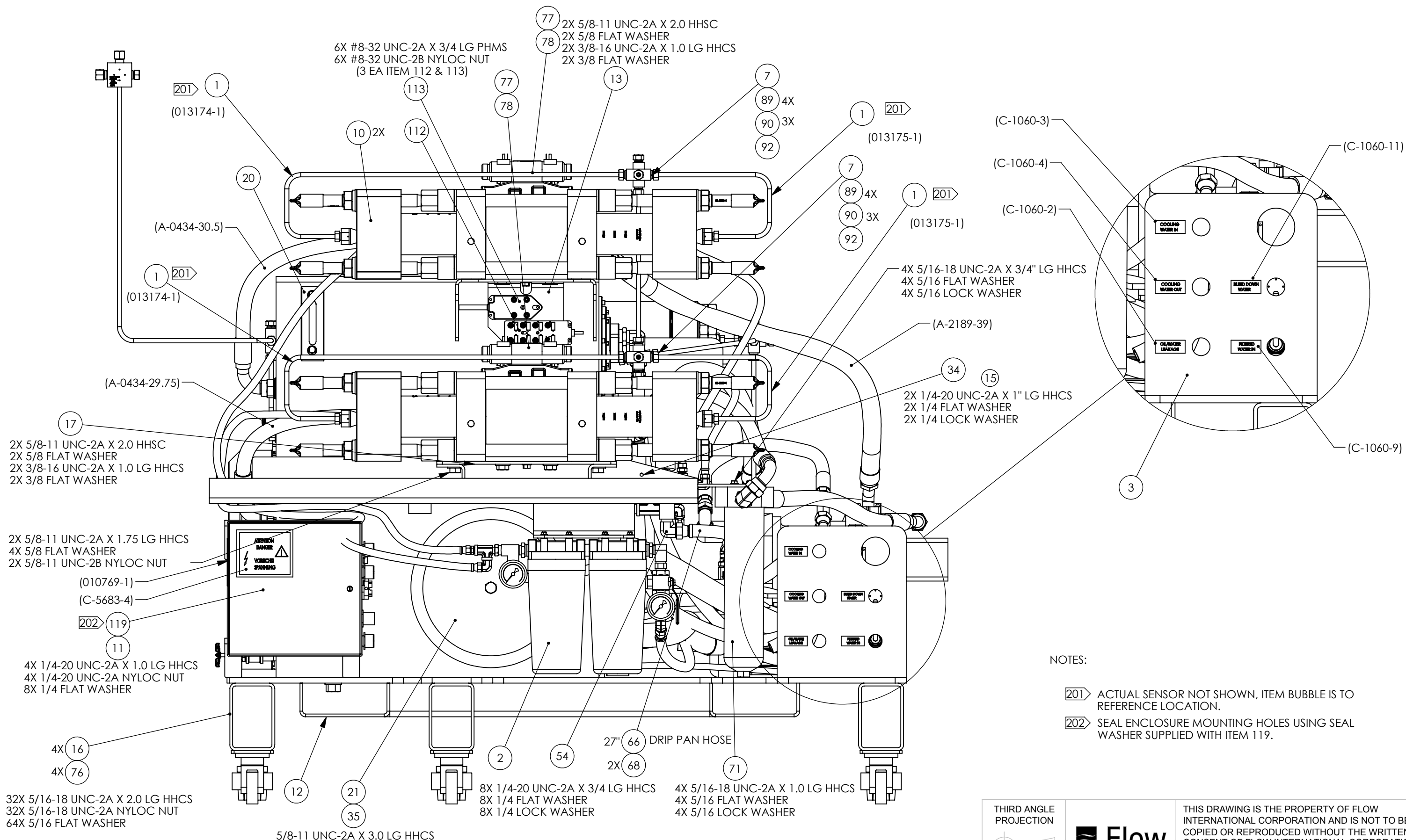
ITEM	QTY	U/M	PART NUMBER	DESCRIPTION	ITEM	QTY	U/M	PART NUMBER	DESCRIPTION	ITEM	QTY	U/M	PART NUMBER	DESCRIPTION
109	2	EA	014749-1	SPACER;INTENSIFIER	49	1	EA	A-0641-3	PLUG;HOLLOW HEX;STR HD;1/4"OD	1	4	EA	002192-3	SENSOR ASSEMBLY;58 DEG.C
110	4.3	ME	A-2884	TUBING;FLEX;13/32	50	1	EA	A-0641-5	PLUG;HOLLOW HEX;STR HD;3/8" OD	2	1	EA	019516-1	FILTER ASSY; 87K 100 ID
111	4.3	ME	A-2887	TUBING;FLEX;9/16	51	1	EA	A-0644-12	ELBOW;45 DEG;STR THD;STL;1" OD	3	1	EA	011891-1	BULKHEAD ASSY;100I-D PUMP
103 112	1	EA	A-21375-1	BLOCK;MULTIPORT;I/O;4 PORT	52	2	EA	A-0656-17	BUSHING;RDCR;THD;BRS;1 X 3/4	4	1	EA	012014-DWG	SCHEMATIC;HYDRAULIC;100 ID 101
103 113	1	EA	A-21672-1	BLOCK;8 PORT;I/O;WITH CABLE	54	3	EA	A-0714-18	ELBOW;MALE;BRS;3/4"OD;3/4 NPTF	5	1	EA	012109-1	PUMP ASSY;BOOSTER;ELEC;100 ID
115	4	EA	A-00017-11	ELBOW;STR THD;1/2";3/4-16	55	2	EA	A-0726-10	ELBOW;SWIVEL;NUT;45 DEG;STEEL	6	1	EA	019579-1	ATTENATOR ASSY;87K (6000 BAR)
116	1	EA	015645-2	LABEL KIT;WMC/IFB PUMP;87K	56	1	EA	A-0726-3	ELBOW;SWIVEL;NUT;45 DEG;STEEL	7	10	EA	014168-1	CROSS;3/8 HP;87KSI;LL
102 117	1	EA	A-20283-25	CRATE;SHIPPING;87K PUMP	57	1	EA	A-0727-8	TEE;SWIVEL;NUT;RUN;STL;3/4" OD	8	1	EA	014182-1	HOSE KIT;100 ID
101 118	2	EA	041403-203	SETTINGS;RELIEF VALVE;CUTTING	58	1	EA	A-0728-8	TEE;SWIVEL;NUT BRANCH;STL;3/4"	9	1	EA	014946-1	CABLE; 2/0; W/LUGS ON ONE END
101 119	1	EA	A-22728-1	SEAL KIT;ELECTRICAL ENCLOSURE	59	1	EA	A-0738-19	CONNECTOR;MALE;STL;3/4" OD	10	2	EA	014623-10	INTENSIFIER ASSY;87 KSI;LONG BLOCK



60	1	EA	A-0738-7	CONNECTOR;MALE;STL;5/16" OD	61	1	EA	A-0742-8	REDUCER;TUBE END;STL;3/4"-3/8"	12	1	EA	019307-1	FRAME;INTEGRATED PUMP;87K
62	1	EA	A-0743-7	TEE;MALE RUN;STL;5/16" OD	63	1	EA	A-0752-21	ELBOW;STREET;STL;1-1/4 NPT	13	1	EA	019308-1	BRACKET; JUNCTION PLATE
64	2	EA	A-0767-1	CONNECTOR;NPT/JIC SWIVEL;STEEL	64	2	EA	A-0767-1	CONNECTOR;NPT/JIC SWIVEL;STEEL	14	1	EA	019309-10	VALVE ASSY;BLDDN;87 KSI;UNTESTED
66	123.75	IN	A-0796-5	HOSE;LOW PRESS;PUSH-LOK;3/4"ID	66	123.75	IN	A-0796-5	HOSE;LOW PRESS;PUSH-LOK;3/4"ID	15	1	EA	019310-1	CABLE KIT;87K PUMP
67	1	EA	A-0798-7	ADAPTER;FILTER/TANK;1.25X1.25	67	1	EA	A-0798-7	ADAPTER;FILTER/TANK;1.25X1.25	16	4	EA	014708-1	SPACER;CASTER;50IS
68	4	EA	A-0817-8	CONNECTOR;37 DEG;SWVL;PUSH-LOK	68	4	EA	A-0817-8	CONNECTOR;37 DEG;SWVL;PUSH-LOK	17	1	EA	019313-1	MOUNTING PLATE;87K INTENSIFIER
69	2	EA	A-0886-8	LOCKNUT;2-1/2	69	2	EA	A-0886-8	LOCKNUT;2-1/2	18	1	EA	019315-1	BRACKET;BLEED DOWN MTG;87K
70	1	EA	A-10831	HEAT EXCHANGER;IN-TANK	70	1	EA	A-10831	HEAT EXCHANGER;IN-TANK	20	1	EA	200680-02	GAUGE;LIQUID LEVEL
71	1	EA	A-12955	HOUSING;FILTER;6 MICRON;VI	71	1	EA	A-12955	HOUSING;FILTER;6 MICRON;VI	21	1	EA	200681-14	COVER;TANK RESERVOIR 14" DIA
72	1	EA	A-14387	COUPLING;HALF;PUMP;C SPLINE	72	1	EA	A-14387	COUPLING;HALF;PUMP;C SPLINE	22	6	EA	201706-12	CLAMP;SUPPORT
73	1	EA	A-14389	ADAPTER;PUMP/MOTOR	73	1	EA	A-14389	ADAPTER;PUMP/MOTOR	25	2	EA	201706-24	CLAMP;SUPPORT;1.5 ID
74	1	EA	A-14433	PUMP;REXROTH;3 PIECE ASSY	74	1	EA	A-14433	PUMP;REXROTH;3 PIECE ASSY	26	2	EA	202699-16	SPLIT FLANGE KIT;CODE 61;1"
75	1	EA	A-14612	MANIFOLD ASSEMBLY;PROPORTIONAL	75	1	EA	A-14612	MANIFOLD ASSEMBLY;PROPORTIONAL	27	2	EA	202699-32	SPLIT FLANGE KIT;CODE 61;2"
76	4	EA	A-19134	CASTER;LEVELING	76	4	EA	A-19134	CASTER;LEVELING	28	2	EA	713802-1	CABLE ASSY.; TWIN CONN.;MOLDED
77	2	EA	A-19559	CORDSET; MICROCHANGE; 4P	77	2	EA	A-19559	CORDSET; MICROCHANGE; 4P	29	4	EA	A-0008-60	SCREW;HEX HD;3/4-10;CS;3-3/4
78	2	EA	A-19560	SHIFT MODULE; INTEGRATED	78	2	EA	A-19560	SHIFT MODULE; INTEGRATED	30	2	EA	A-00319-23	WASHER;RDCG;3-2.5; CONDUIT KO
79	3	EA	A-19741-3	CONNECTOR; INSUL MECH;2P;3/0	79	3	EA	A-19741-3	CONNECTOR; INSUL MECH;2P;3/0	33	1	EA	A-00835-4	CE MOTOR;100 HP;460V;405TSC;F2
81	1	EA	A-2237	COUPLING INSERT;MAGNALOY #570	81	1	EA	A-2237	COUPLING INSERT;MAGNALOY #570	34	14	EA	A-0288-5	SEAL;FASTENER & FTG;SIZE -1/4
83	2	EA	A-3582	FILTER;TANK	83	2	EA	A-3582	FILTER;TANK	35	1	EA	A-0405-17	WASHER;FLAT;NYLON;.656 ID
101 84	1	EA	A-3609	BREATHER;THREADED	84	1	EA	A-3609	BREATHER;THREADED	36	1	EA	A-0519-9	COUPLING;BRONZE;3/4 NOM
85	1	EA	A-4261	HALF;FLEXIBLE COUPLING	85	1	EA	A-4261	HALF;FLEXIBLE COUPLING	37	2	EA	A-0567-35	CONN;STRN RLF;LIQ TIGHT;2-1/2
86	1	EA	A-4421	DRAIN COCK;BRASS BOILER;3/4"	86	1	EA	A-4421	DRAIN COCK;BRASS BOILER;3/4"	38	2	EA	A-0570-7	SEALING GASKET;CONDUIT;2-1/2
88	2	EA	A-9478	CHK VALVE;INLINE;POPPET STYLE	88	2	EA	A-9478	CHK VALVE;INLINE;POPPET STYLE	39	1	EA	A-0575-27	REDUCER;STEEL;3 TO 2 1/2
89	28	EA	A-2838	GLAND;HIGH PRESSURE;3/8	89	28	EA	A-2838	GLAND;HIGH PRESSURE;3/8	40	1	EA	A-0589-2	NIPPLE;PIPE;BRASS;3/4 NPT;2"LG
101 90	38	EA	A-2839	COLLAR;HIGH PRESSURE;3/8	90	38	EA	A-2839	COLLAR;HIGH PRESSURE;3/8	41	1	EA	A-0635-16	REDUCER;EXPANDER;STL;1-1/2 OD
91	1	EA	A-21842-1	CE SENSOR;100KPSI;0-10VDC	91	1	EA	A-21842-1	CE SENSOR;100KPSI;0-10VDC	42	1	EA	A-0636-19	CONNECTOR;STR THD;STL;3/4" OD
92	12	EA	012252-1	PLUG;3/8;H.P.;100K	92	12	EA	012252-1	PLUG;3/8;H.P.;100K	43	1	EA	A-0636-23	CONNECTOR;STR THD;STL;1" OD
105	2	EA	007823-1	RETAINER;ATTENUATOR	105	2	EA	007823-1	RETAINER;ATTENUATOR	44	2	EA	A-0636-5	CONNECTOR;STR THD;STL;1/4" OD
106	1	EA	019653-1	HP TUBING KIT 87K, 100ID	106	1	EA	019653-1	HP TUBING KIT 87K, 100ID	45	1	EA	A-0636-8	CONNECTOR;STR THD;STL;3/8" OD
107	2	EA	013149-1	ADAPTER;3/8M X 1/4F;6000 BAR	107	2	EA	013149-1	ADAPTER;3/8M X 1/4F;6000 BAR	46	1	EA	A-0638-20	ELBOW;STR THD;3/4 OD;7/8-14
108	2	EA	012952-1	PLUG;DOUBLE CONE;3/8;6000 BAR	108	2	EA	012952-1	PLUG;DOUBLE CONE;3/8;6000 BAR	47	2	EA	A-0638-24	ELBOW;STR THD;1 OD;1 5/16-12
										48	3	EA	A-0638-3	ELBOW;STR THD;STL;1/4" OD

NOTES:
 101 ITEM NOT SHOWN.
 102 CONTENT OF KIT SHOWN AS REFERENCE.
 103 ALL HIGH PRESSURE TUBING ON PUMP TO BE DOUBLE SHIELDED WITH BOTH ITEMS 110 & 111.

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REVISION E		MODELED IN SOLIDWORKS		MATERIAL SEE BOM	
DRAWN BY G.WILLIAMS		STARTED 2-10-06		TITLE 87K 100 ID PUMP TOP ASSEMBLY	
ENG S.MORDRE		SCALE 1:16		BASE PART NUMBER 019305	
1 OF 7					

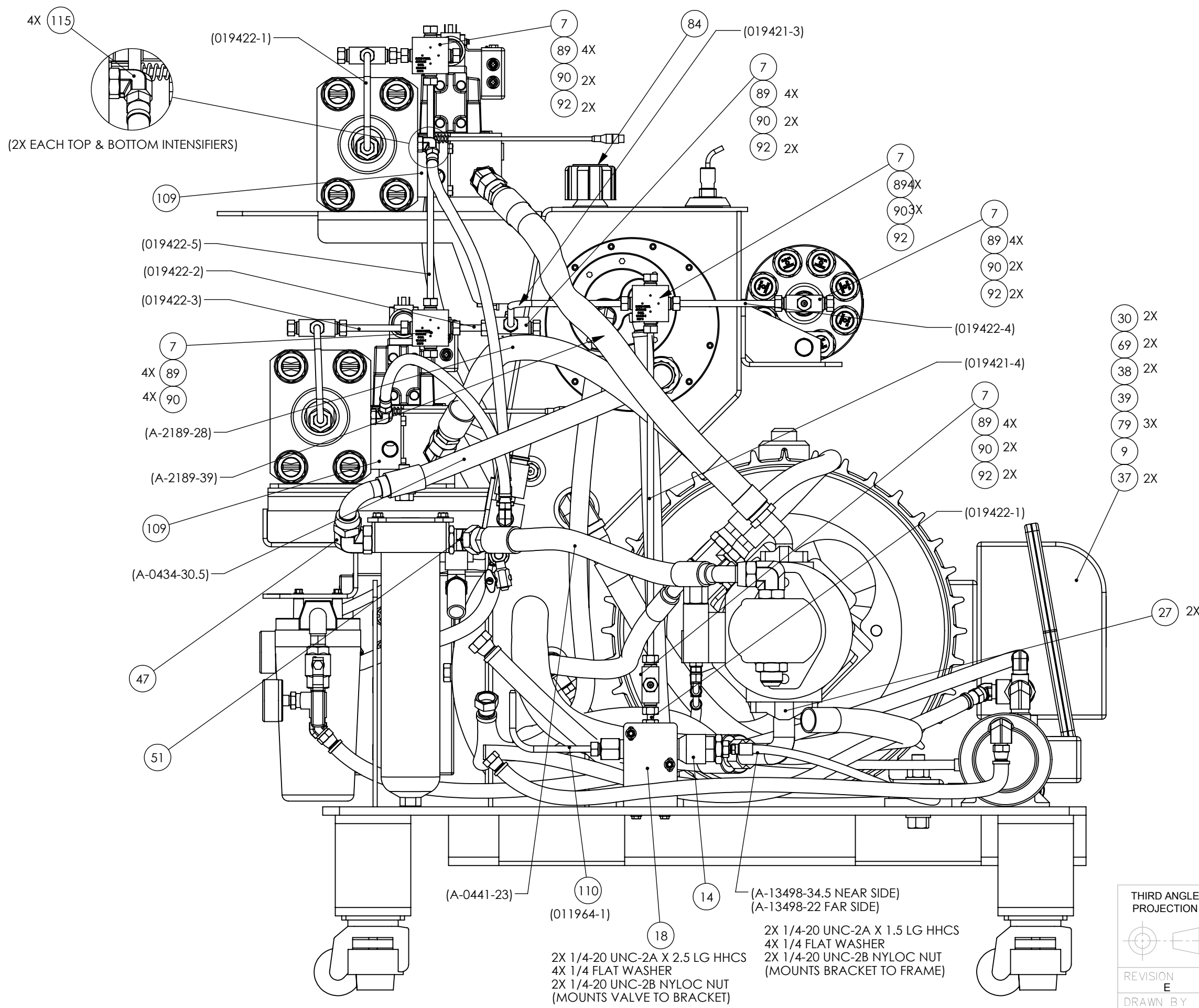


NOTES:
 201 ACTUAL SENSOR NOT SHOWN, ITEM BUBBLE IS TO REFERENCE LOCATION.
 202 SEAL ENCLOSURE MOUNTING HOLES USING SEAL WASHER SUPPLIED WITH ITEM 119.

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REVISION E		MATERIALIZED IN SOLIDWORKS	TITLE
DRAWN BY G.WILLIAMS	STARTED 2-10-06	SCALE	1:16
ENG S.MORDRE	BASE PART NUMBER	019305	2 OF 7


NOTES:
301. VIEW SHOWN WITHOUT HIGH PRESSURE TUBE & FITTINGS
INTERFACE TO CUTTING TABLE.

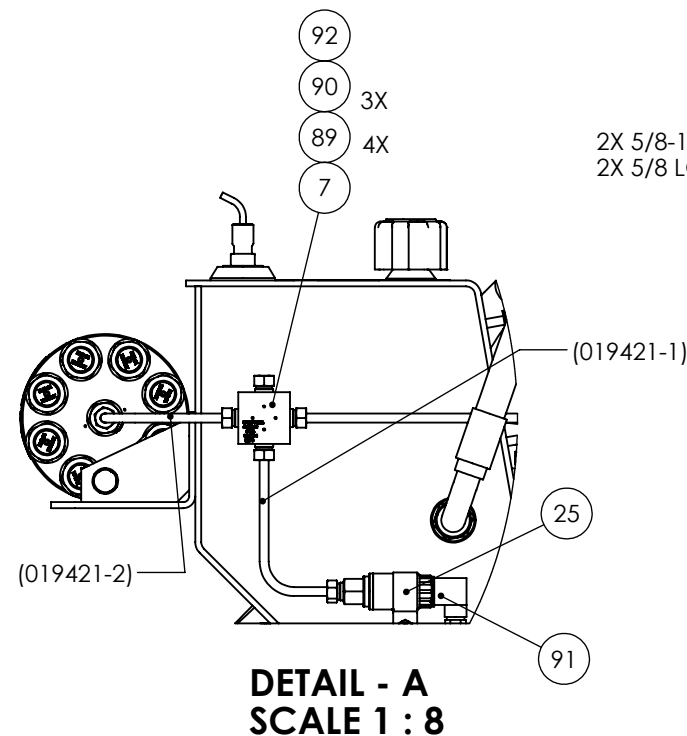


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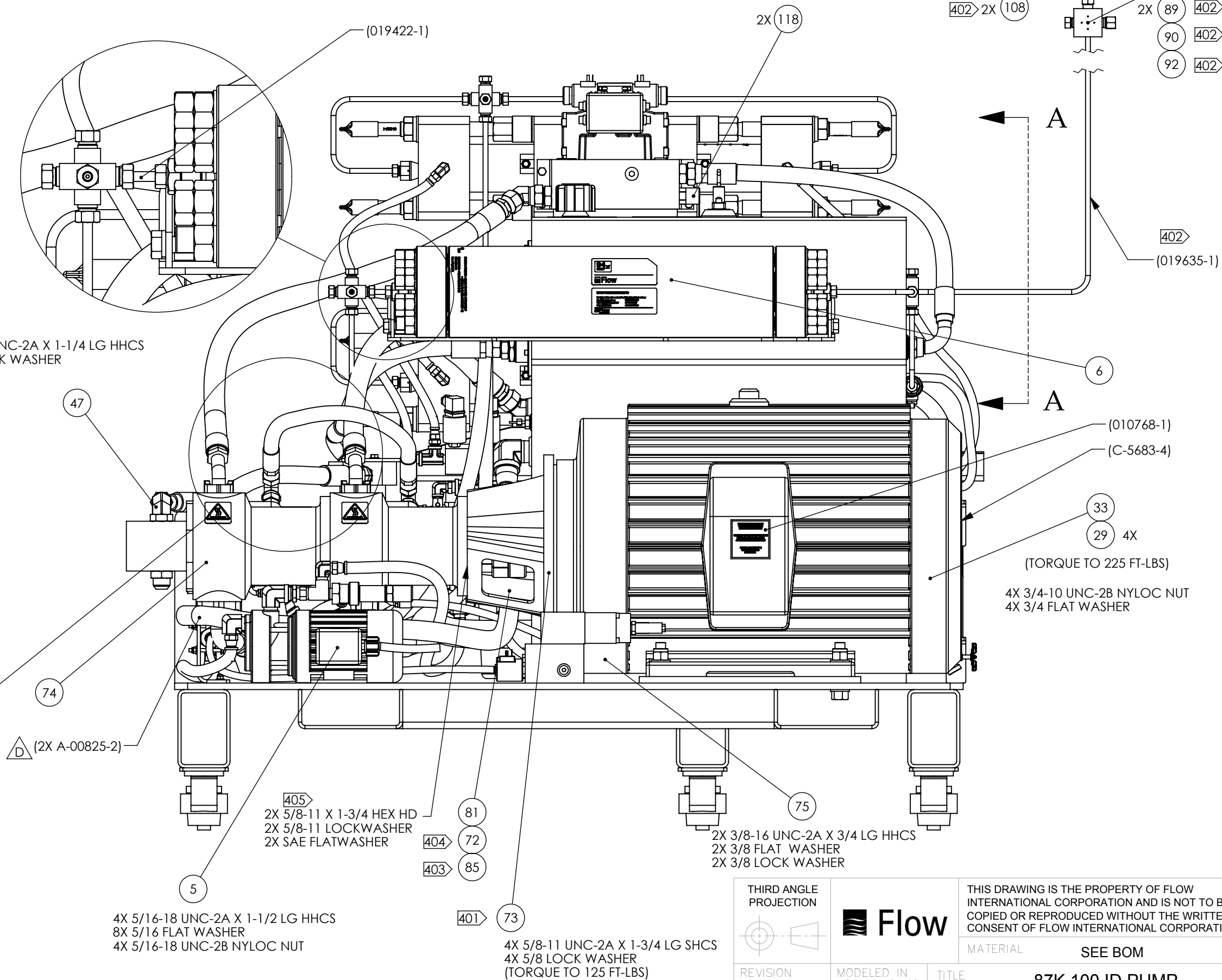
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REVISION E	MODELED IN SOLIDWORKS	TITLE		87K 100 ID PUMP TOP ASSEMBLY	
DRAWN BY G.WILLIAMS	STARTED 2-10-06	BASE PART NUMBER		019305	
ENG S.MORDRE	SCALE 1:16			3 OF 7	

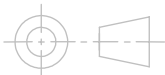
NOTES:

- 401 > APPLY ITEM 19 AND TORQUE AS SPECIFIED.
- 402 > ITEMS ARE NOT ASSEMBLED WITH PUMP. PARTS WILL BE INSTALLED DURING CUTTING TABLE INSTALLATION.
- 403 > APPLY PRIMER 7471 THEN LOCTITE 262 TO ITEM 85 SETSCREW OVER KEY, TORQUE TO 190~200 IN-LBS
- 404 > APPLY PRIMER 7471 THEN LOCTITE 262 TO ITEM 72 SPLIT LINE BOLT, TORQUE TO 300~310 IN-LBS
- 405 > TORQUE TO 70 FT/LBS. 



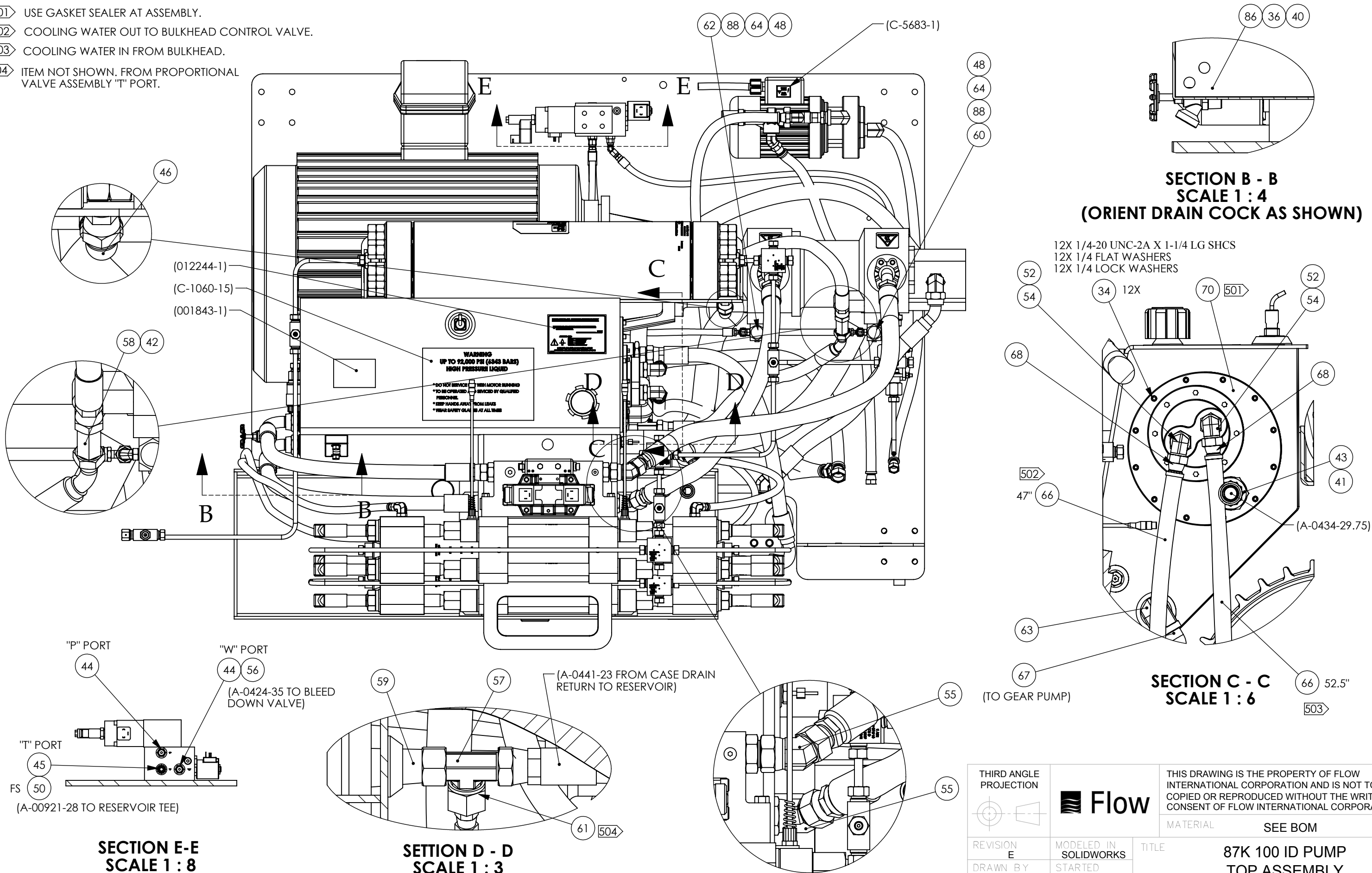
2X 5/8-11 UNC-2A X 1-1/4 LG HHCS
2X 5/8 LOCK WASHER



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		MATERIAL SEE BOM	
REVISION E	MODELED IN SOLIDWORKS	TITLE	
DRAWN BY G.WILLIAMS	STARTED 2-10-06	87K 100 ID PUMP TOP ASSEMBLY	
ENG S.MORDRE	SCALE 1:16	BASE PART NUMBER	019305
			4 OF 7

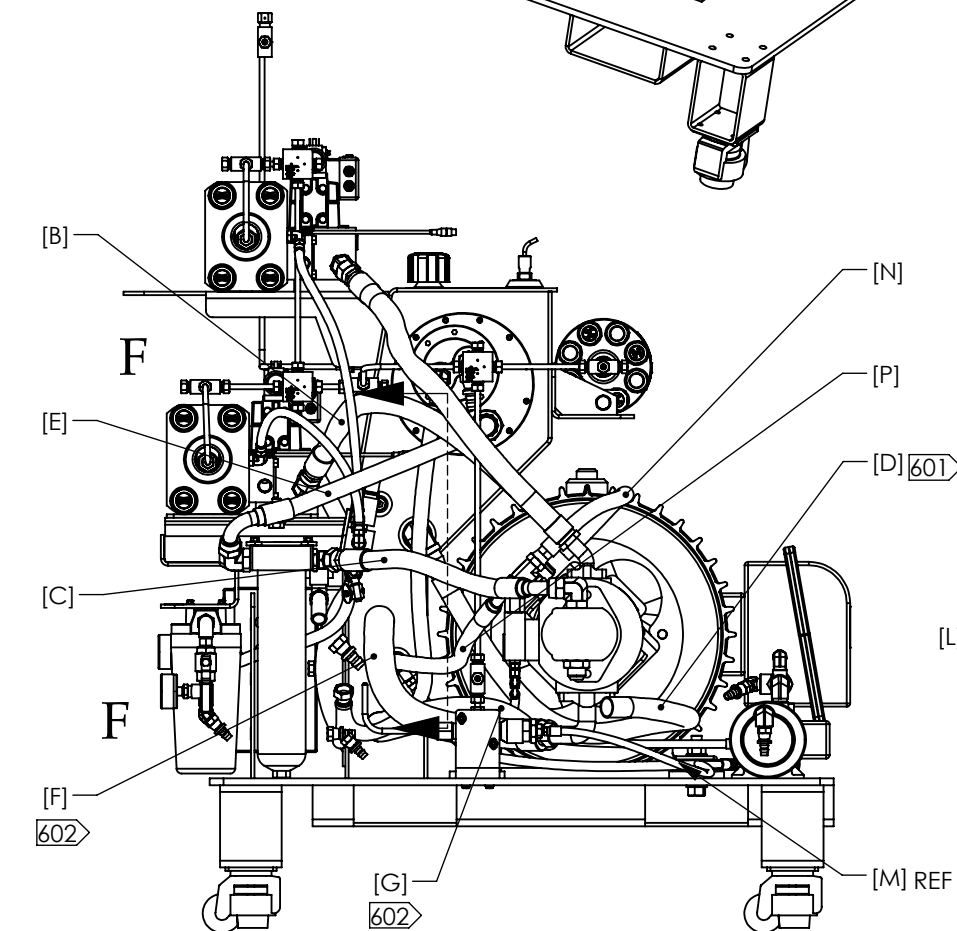
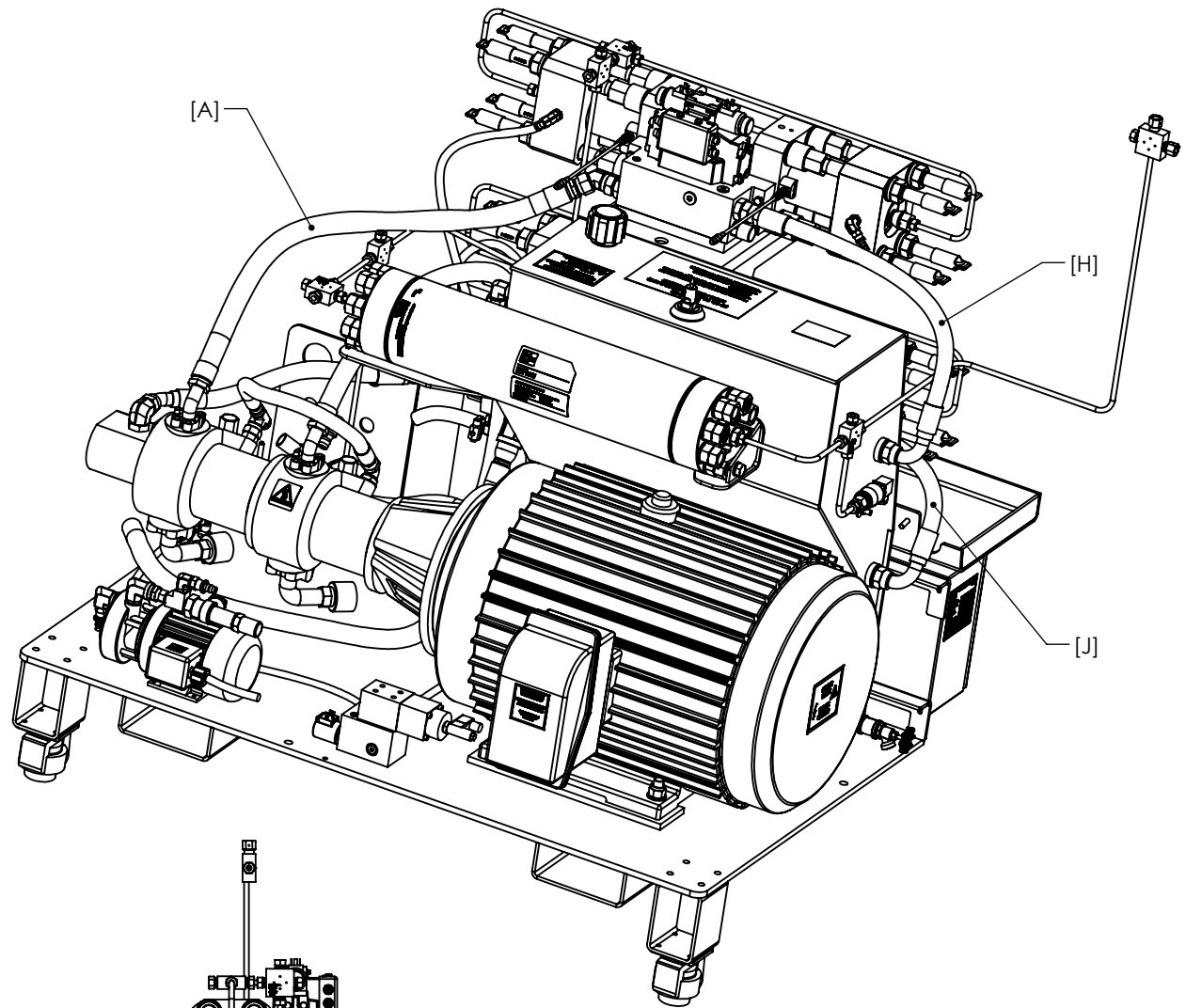
NOTES:

- 501 USE GASKET SEALER AT ASSEMBLY.
- 502 COOLING WATER OUT TO BULKHEAD CONTROL VALVE.
- 503 COOLING WATER IN FROM BULKHEAD.
- 504 ITEM NOT SHOWN. FROM PROPORTIONAL VALVE ASSEMBLY "T" PORT.



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REVISION E	MODELED IN SOLIDWORKS	TITLE 87K 100 ID PUMP TOP ASSEMBLY	
DRAWN BY G.WILLIAMS	STARTED 2-10-06	BASE PART NUMBER 019305	
ENG S.MORDRE	SCALE 1:16	5 OF 7	

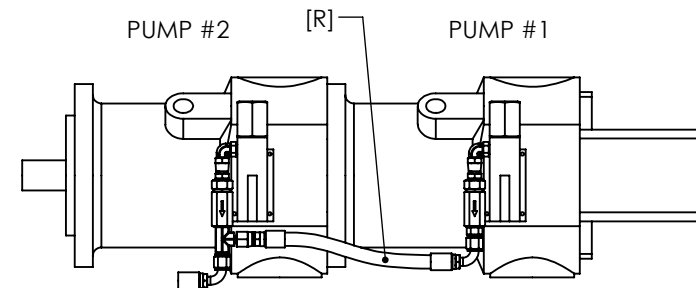


**SECTION F - F
SCALE 1:4**

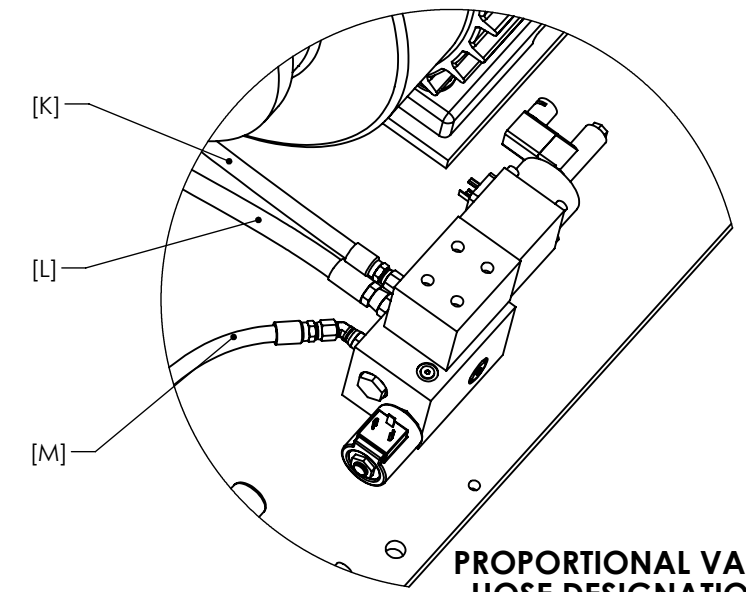
NOTES:

- 601 ELBOW FITTING LOCATED AT GEAR PUMP INLET IS SUPPLIED WITH GEAR PUMP.
- 602 TANK FITTING IS HARD MOUNTED (WELDED) TO HYDRAULIC TANK ON FRAME.
- 603. HOSE CHART REFLECTS ALL HYDRAULIC HOSES IN 014182-1; HOSE KIT;100 ID.

HYDRAULIC HOSE ASSEMBLY CHART						
HOSE REF	QTY	LOCATION FROM	FITTING REF	LOCATION TO	FITTING REF	LETTER REF
A-2189-39	1	#1 Hyd Pump	A-0046-16-16	#1 Intensifier Inlet	A-0077-16-16	[A]
A-2189-28	1	#2 Hyd Pump	A-0046-16-16	#2 Intensifier Inlet	A-0077-16-16	[B]
A-0441-23	1	Gear Pump Motor Outlet (pressure)	A-0074-16-16	Hydraulic Filter Inlet	A-0068-16-16	[C]
A-00824-3	1	Hydraulic Tank	A-0798-7	Gear Pump Motor Inlet (suction)	See Flag Note 601	[D]
A-0434-30.5	1	Hydraulic Filter Outlet	A-0088-16-16	Heat Exchanger Inlet	A-0068-16-16	[E]
A-13498-34.5	1	Hydraulic Tank (Top Ftg)	See Flag Note 602	#1 Hyd Pump Inlet (suction)	A-0076-32-24	[F]
A-13498-22	1	Hydraulic Tank (Bottom Ftg)	See Flag Note 602	#2 Hyd Pump Inlet (suction)	A-0076-32-24	[G]
A-0434-30.5	1	#1 Intensifier Outlet	A-0068-16-16	Hydraulic Tank	A-0088-16-16	[H]
A-0434-29-75	1	#2 Intensifier Outlet	A-0068-16-16	Hydraulic Tank	A-0088-16-16	[J]
A-0426-29	1	Proportional Valve "P" Port	A-0068-4-4	Rexroth Compensator Control Tee Pump #2	A-0088-5-4	[K]
A-00921-28	1	Proportional Valve "T" Port	A-0068-6-6	Case Drain Return Tee to Reservoir	A-0068-6-6	[L]
A-0424-35	1	Proportional Valve "W" Port	A-0068-4-4	Bleed Down Valve	A-0068-4-4	[M]
A-0431-19	1	#2 Hyd Pump Return	A-0068-12-12	#1 Hyd Pump Return	A-0068-12-12	[N]
A-00930-19.5	1	#1 Hyd Pump Return	A-0074-12-12	Case Drain Return Tee to Reservoir	A-0068-12-12	[P]
A-0429-10.25	1	Rexroth Compensator Control Tee Pump #2	A-0068-5-4	Rexroth Compensator Control Pump #1	A-0088-5-4	[R]



COMPENSATOR CONTROL DETAIL

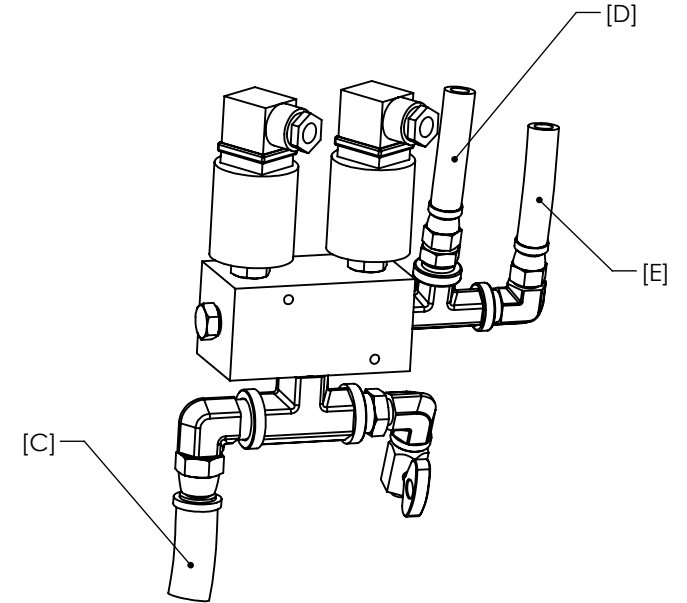
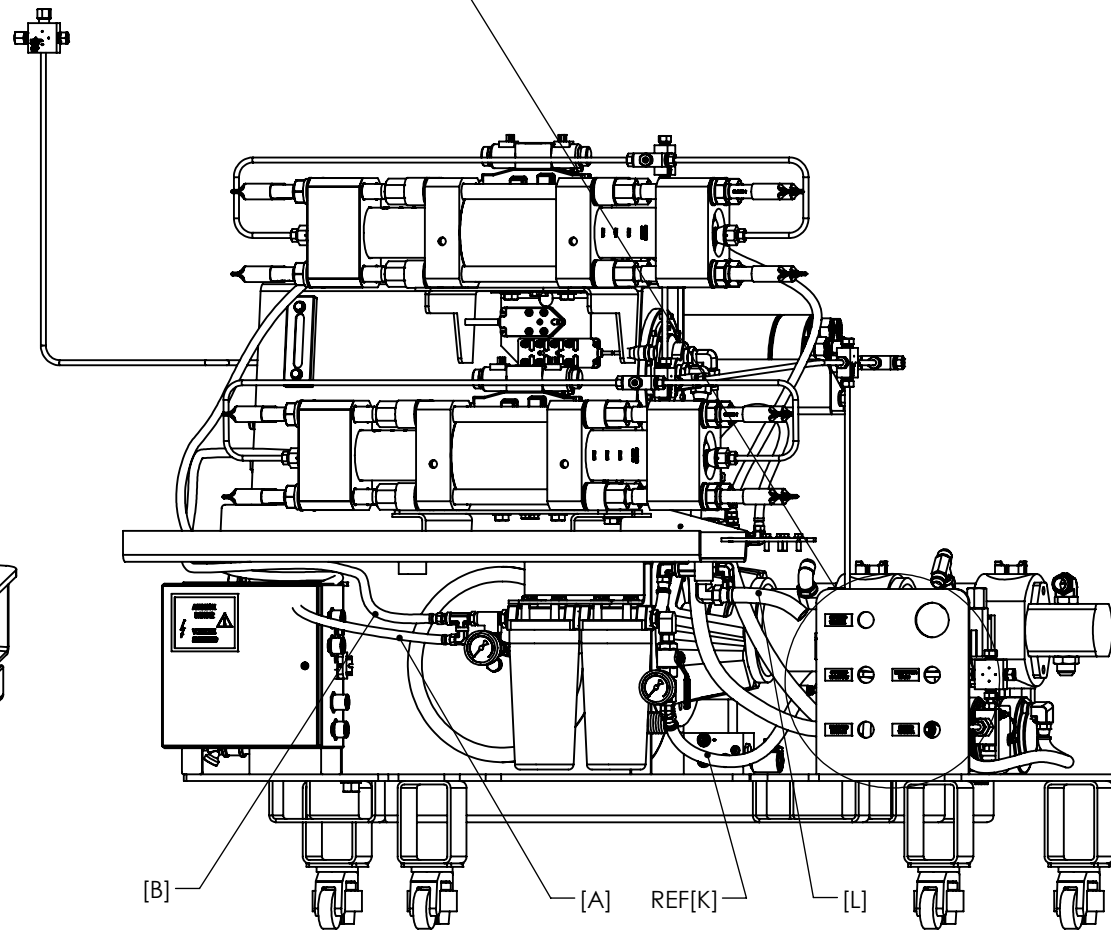
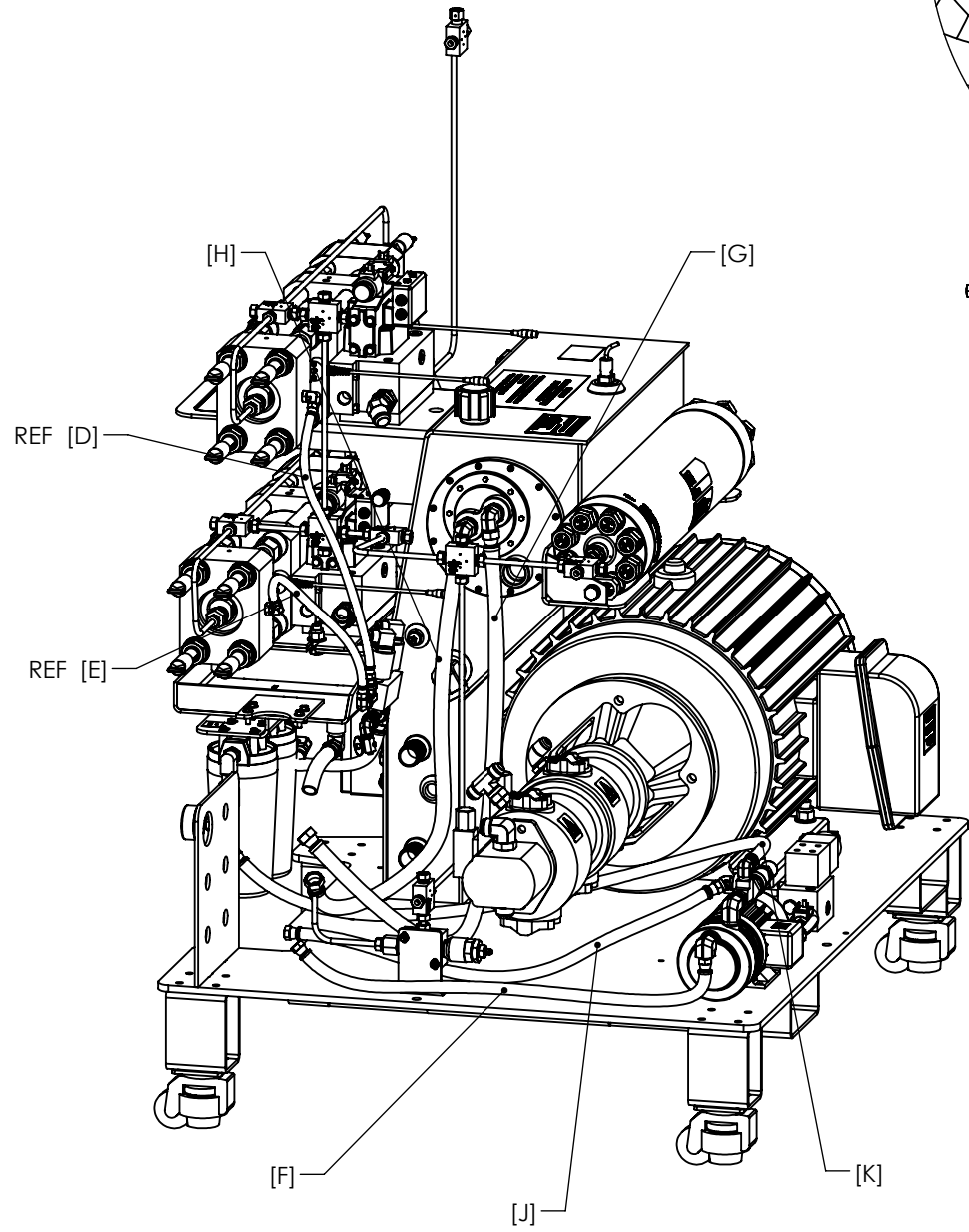
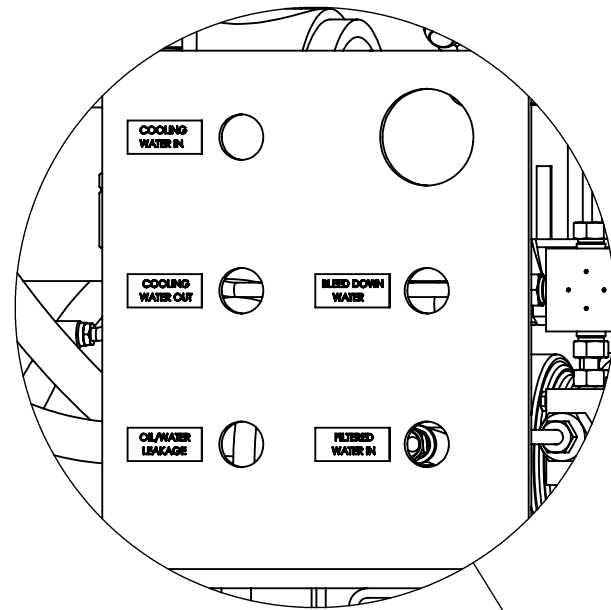


**PROPORTIONAL VALVE
HOSE DESIGNATIONS**

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REVISION E		MODELED IN SOLIDWORKS	TITLE 87K 100 ID PUMP TOP ASSEMBLY
DRAWN BY G.WILLIAMS	STARTED 2-10-06	MATERIAL SEE BOM	BASE PART NUMBER 019305
ENG S.MORDRE	SCALE 1:24		6 OF 7

NOTES:
 701. INTENSIFIER DESIGNATION: FACING THE INTENSIFIERS IS FRONT OF PUMP.
 LEFT SIDE IS PORT & RIGHT SIDE IS STARBOARD. TOP INTENSIFIER IS INTENSIFIER
 #1 AND BOTTOM INTENSIFIER IS #2.

Water Filter Assy Intensifier #2 Outlet	A-0817-3	Intensifier #2 Port Inlet	A-0817-3	A-0796-2	56.5"	[B]
Water Filter Assy Water Manifold Supply	A-0817-5	Water Manifold Inlet	A-0817-5	A-0796-3	29.5"	[C]
Water Manifold Outlet Intensifier #1 Outlet	A-0817-3	Intensifier #1 Starboard Inlet	A-0817-3	A-0796-2	25"	[D]
Water Manifold Outlet Intensifier #2 Outlet	A-0817-3	Intensifier #2 Starboard Inlet	A-0817-3	A-0796-2	40"	[E]
Bulkhead "Filtered Water In"	A-0817-8	Booster Pump Inlet	A-0817-5	A-0796-3	41"	[F]
Bulkhead "Cooling Water In"	A-0817-8	Heat Exchanger Cooling Water Inlet	A-0817-8	A-0796-5	52.5"	[G]
Bulkhead "Cooling Water Out"	A-0817-8	Heat Exchanger Cooling Water Out	A-0817-8	A-0796-5	47"	[H]
Bulkhead "Filter Water In" Return	A-0817-5	Boost Pump	A-0817-5	A-0796-3	35"	[J]
Boost Pump Outlet	A-0817-5	Water Filter Bank Inlet	A-0822-3	A-0796-3	40"	[K]
Pump Frame Drip Pan	A-0817-8	Bulkhead "Oil/Water Leakage"	A-0817-8	A-0796-5	24.25"	[L]



MANIFOLD DETAIL

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REVISION E		MATERIAL	SEE BOM
DRAWN BY G.WILLIAMS	MODELED IN SOLIDWORKS	TITLE	87K 100 ID PUMP TOP ASSEMBLY
ENG S.MORDRE	SCALE 1:24	BASE PART NUMBER	019305
			7 OF 7