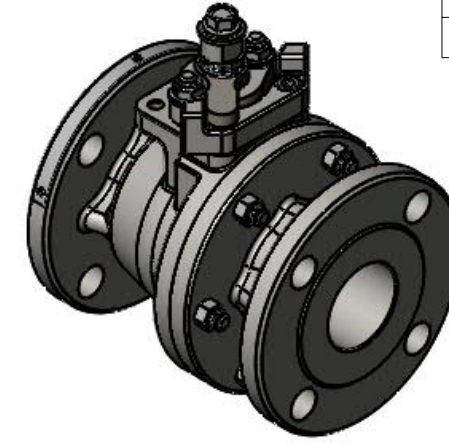
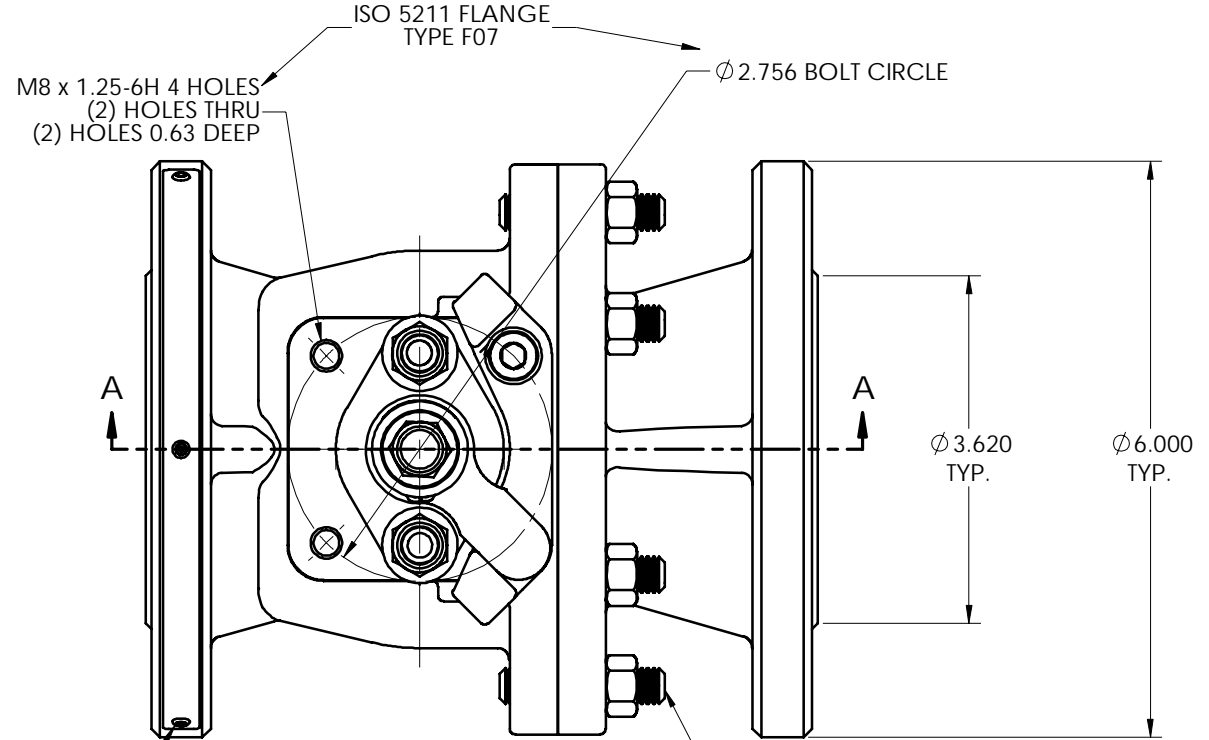


LET	ECN	REVISION	DRAWN	APPROVED	DATE
A	43653	REVISED NOTE 5 ADDED (ESNA) TO ITEM 30	PJD	KAS	4/13/16
B	43764	REMOVED METRIC DIMENSIONS REVISED NOTE 5 ADDED NOTE 6	PJD	KAS	6/10/16
C	44414	SEE ECN FOR CHANGES	KML	PJD	8-23-18

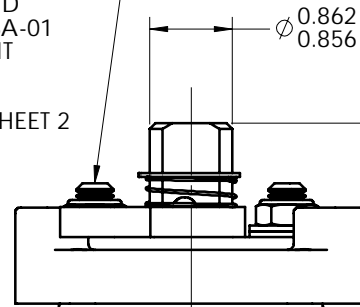


- NOTES:
- Ⓒ 1. ATTACH IDENTIFICATION TAG PER JS-115.
  - 2. FOR INSTALLATION, MAINTENANCE & OPERATING INSTRUCTIONS SEE IMO-R29.
  - 3. WHERE IDENTIFICATION APPEARS ON NUT OR STUD FACE, ASSEMBLE WITH IDENTIFICATION ALWAYS VISIBLE.
  - 4. STUD HEIGHT IS ONLY APPLICABLE WHEN USING CONTINUOUS THREADED STUDS. WHEN USING CONTINUOUS THREADED STUDS, USE LOCTITE #271 ON STUD THREADS INTO BODY PER JSA-34. DOUBLE ENDED STUDS DO NOT REQUIRE LOCTITE.
  - 5. DIMENSIONS ARE IN INCHES. (A) (B)
  - 6. SEE INSTRUCTIONAL DRAWING I-1774 (B) FOR HANDLE OPTIONS AND DIMENSIONS.
  - Ⓒ 7. DOUBLE ENDED STUDS MAY BE SUBSTITUTED WITH CONTINUOUS THREADED STUDS IN THE SAME MATERIAL. APPROVED CONTINUOUS THREADED STUD SUBSTITUTIONS ARE SHOWN ON INSTRUCTIONAL DRAWING, I-1783.

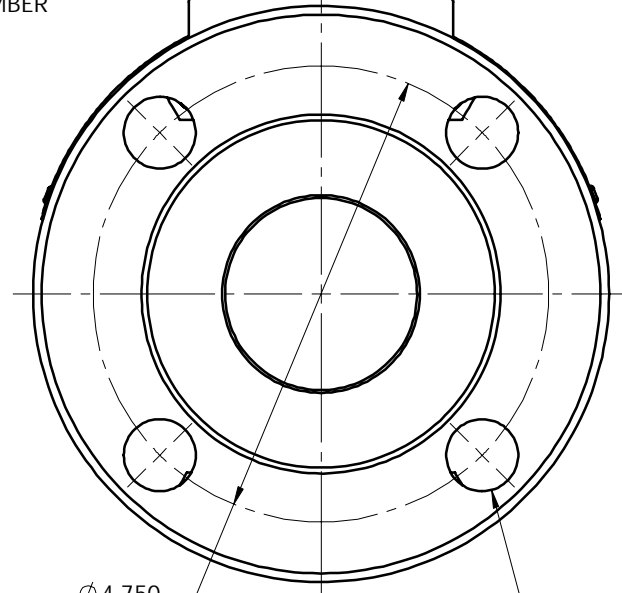


LUBRICATE STUD THREADS AND BOTTOM FACE OF NUT PER JSA-01 OR A COMPATIBLE LUBRICANT FOR THE GIVEN VALVE (SEE NOTE 3) TORQUE NUT TO 4 FT.-LBS.

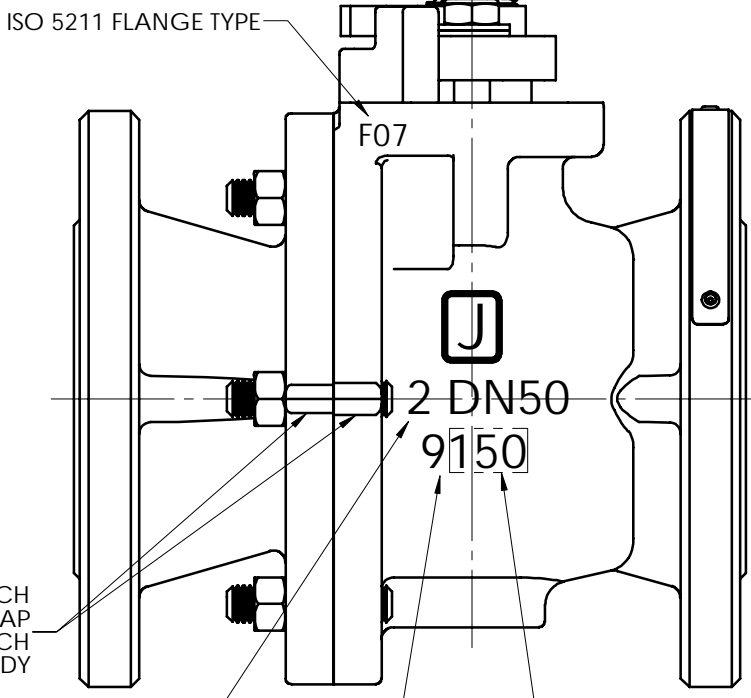
LUBRICATE STUD THREADS AND BOTTOM FACE OF NUT PER JSA-01 OR A COMPATIBLE LUBRICANT FOR THE GIVEN VALVE (SEE NOTE 3) TORQUE NUT PER TABLE ON SHEET 2



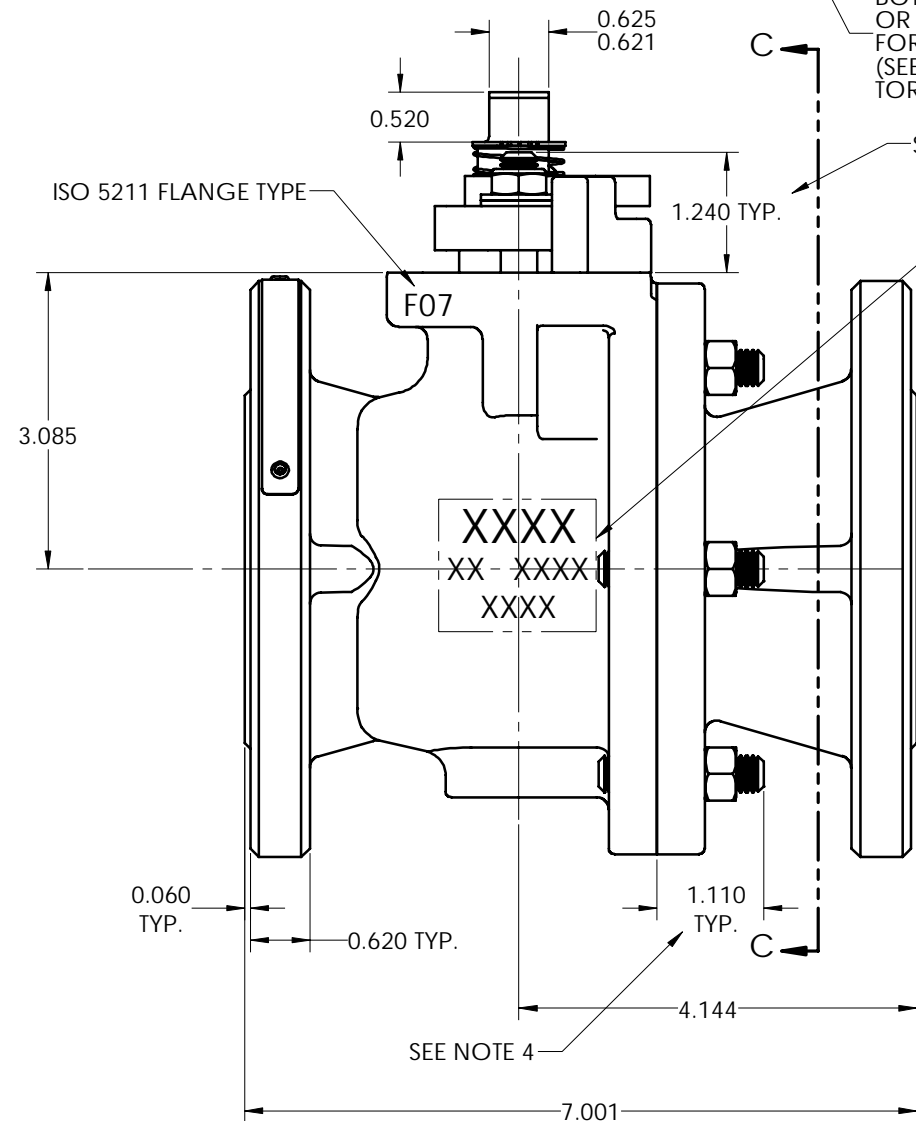
MATERIAL IDENT  
FOUNDRY IDENT  
BODY CASTING NO.  
HEAT NUMBER



ALIGN VEE NOTCH ON BODY CAP WITH VEE NOTCH ON BODY



VALVE SIZE VALVE SERIES PRESSURE CLASS



SEE NOTE 4

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SPECIFICATIONS TO BE USED IN CONJUNCTION WITH THIS DRAWING  
JSA-01, JST-02  
JSA-10, JSA-17  
JSA-34, JSA-85  
JS-115  
IMO-R29

MAKE FROM PART NO.

**RESTRICTED**

TITLE: VALVE ASSEMBLY  
2" SERIES 9150RR MODEL C  
FULL BORE ASME CLASS 150  
FLANGED BALL VALVE

DRAWN	DATE
PJD	6/22/18
APPVD.	DATE
KAS	7/1/15

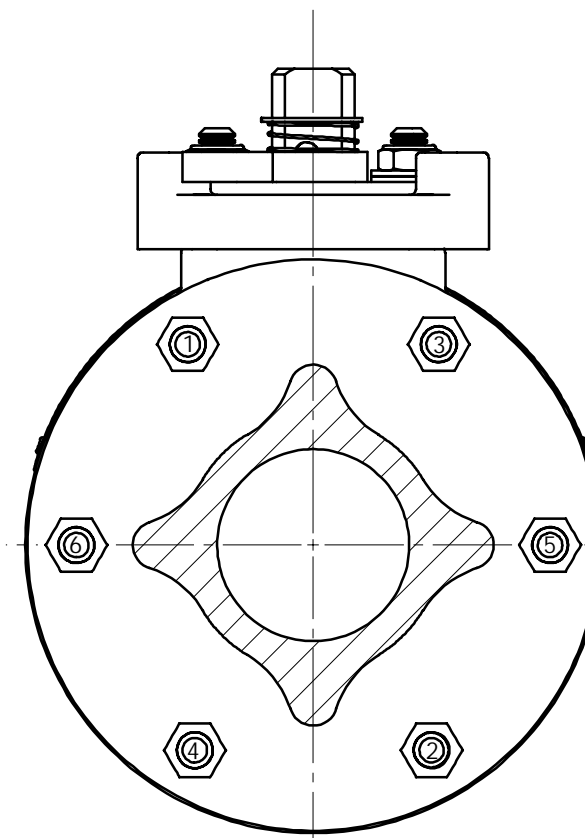
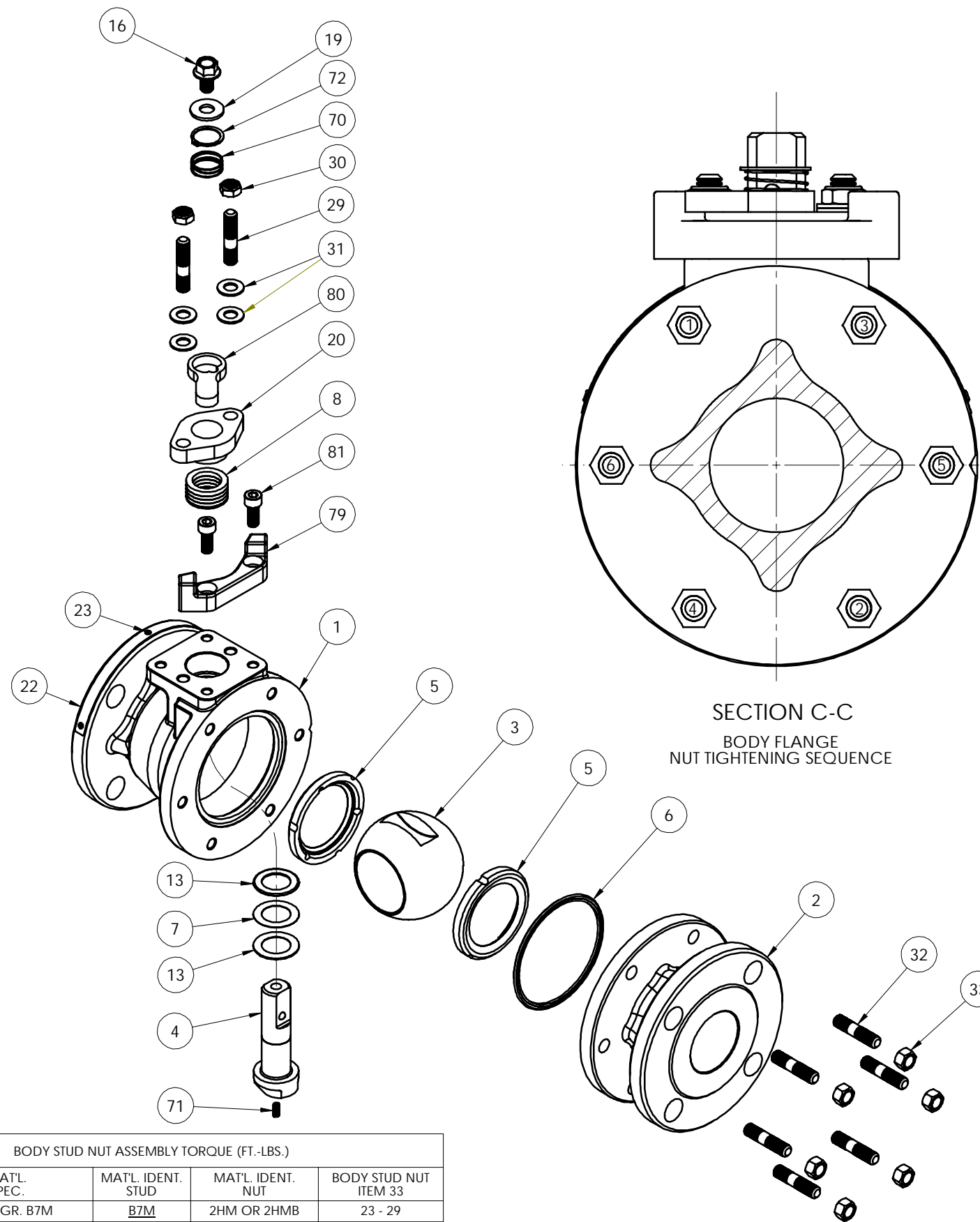
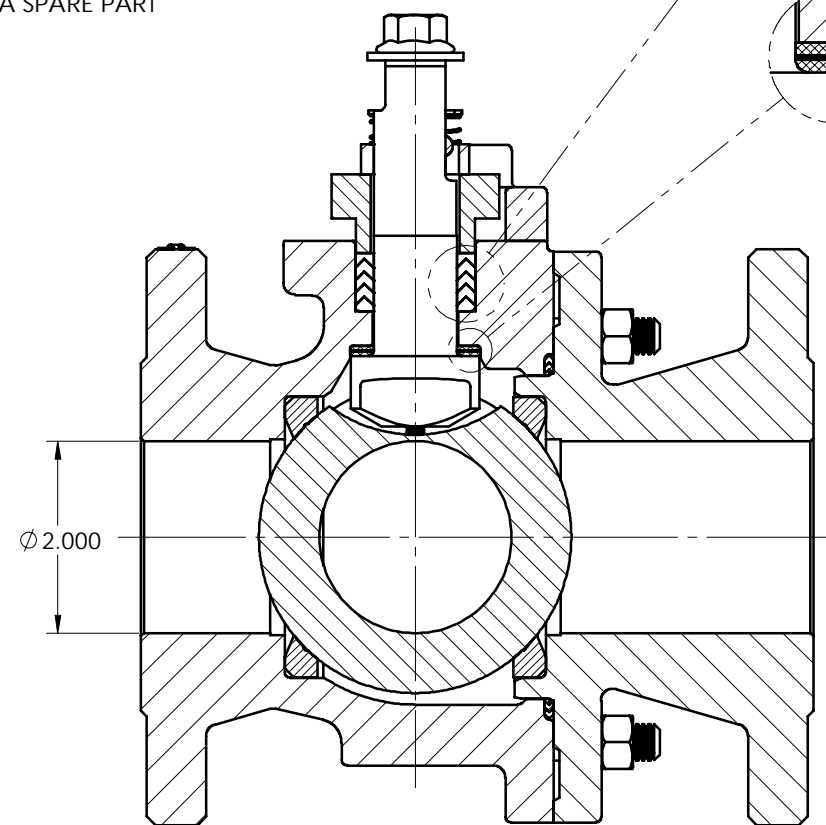
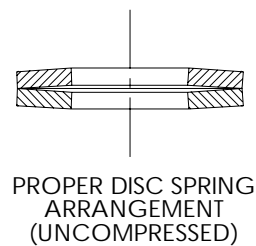
SIZE DWG NO. REV

D 5571 C

SHREWSBURY, MASSACHUSETTS

ITEM NO.	DESCRIPTION	QTY.	SPARE PART
1	BODY	1	N/A
2	BODY CAP	1	N/A
3	BALL	1	B
4	STEM	1	B
5	SEAT	2	A
6	BODY SEAL	1	A
7	SECONDARY STEM SEAL	1	A
8	STEM SEAL	1	A
13	STEM BEARING	2	A
16	HEX. HEAD CAP SCREW	1	B
17	HANDLE (SEE NOTE 6)	1	B
19	FLAT WASHER	1	B
20	COMPRESSION PLATE	1	B
22	IDENTIFICATION TAG	1	N/A
23	POP RIVET	3	N/A
29	BONNET STUD	2	B
30	BONNET STUD NUT (ESNA)	2	B
31	DISC SPRING	4	B
32	BODY STUD	6	B
33	BODY STUD NUT	6	B
70	TOP GROUNDING SPRING	1	B
71	BOTTOM GROUNDING SPRING	1	B
72	RETAINING RING	1	B
79	TRAVEL STOP	1	B
80	INDICATOR STOP	1	B
81	SOCKET HEAD CAP SCREW	2	B

A= PART SUPPLIED IN SPARE PART SET  
 B= PART MAY BE ORDERED AS REQUIRED FOR REPAIR  
 N/A= NOT AVAILABLE AS A SPARE PART



BODY STUD NUT ASSEMBLY TORQUE (FT.-LBS.)				
MAT'L. CODE	MAT'L. SPEC.	MAT'L. IDENT. STUD	MAT'L. IDENT. NUT	BODY STUD NUT ITEM 33
19	A-193 GR. B7M	<u>B7M</u>	2HM OR 2HMB	23 - 29
20	A-193 GR. B7	<u>B7</u>	2H OR 2HB	30 - 38
31	A-193 GR. B8	<u>B8, B8C OR B8T</u>	<u>8B, 8CB OR 8TB</u>	33 - 41
35	B-473 CARPENTER 20Cb-3	<u>A20</u>	<u>A20</u>	17 - 22
71	QQ-N-286	<u>K</u>	<u>K</u>	23 - 28

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RESTRICTED

TITLE: VALVE ASSEMBLY  
 2" SERIES 9150RR MODEL C  
 FULL BORE ASME CLASS 150  
 FLANGED BALL VALVE

DATE: 6/22/18  
 DATE: 7/1/15

metso  
 SHREWSBURY, MASSACHUSETTS

SIZE: D  
 DWG NO: 5571  
 REV: C