

SECTION A-A
SCALE 1:2

ITEM NO.	PART NAME	Material	Weight	QTY.
1	SLEEVE	Aluminum Bronze	0.05	1
2	SPACER	AISI 1035 Steel (SS)	0.03	1
3	MOUNT	1060 Alloy	0.60	1
4	SHAFT	Plain Carbon Steel	0.61	1
5	BODY	AISI 1035 Steel (SS)	1.11	1
6	RUBBER RING	Rubber	0.02	2
7	PISTON	1060 Alloy	0.24	1
8	END CAP	1060 Alloy	0.38	1

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL: \pm
ANGULAR: MACH \pm BEND \pm
TWO PLACE DECIMAL \pm
THREE PLACE DECIMAL \pm

MATERIAL:

DATE:

12/4/2024

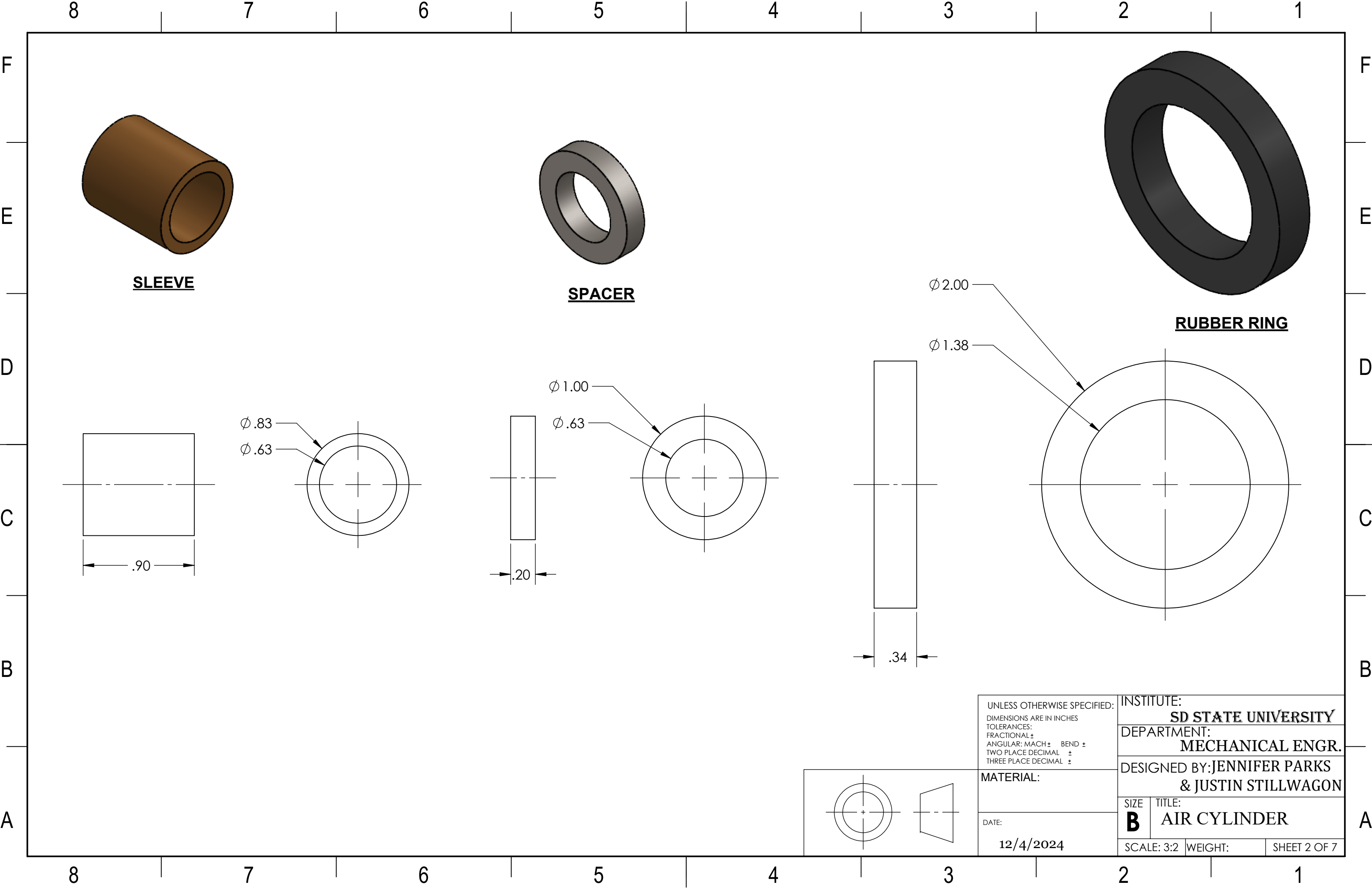
INSTITUTE:
SD STATE UNIVERSITY

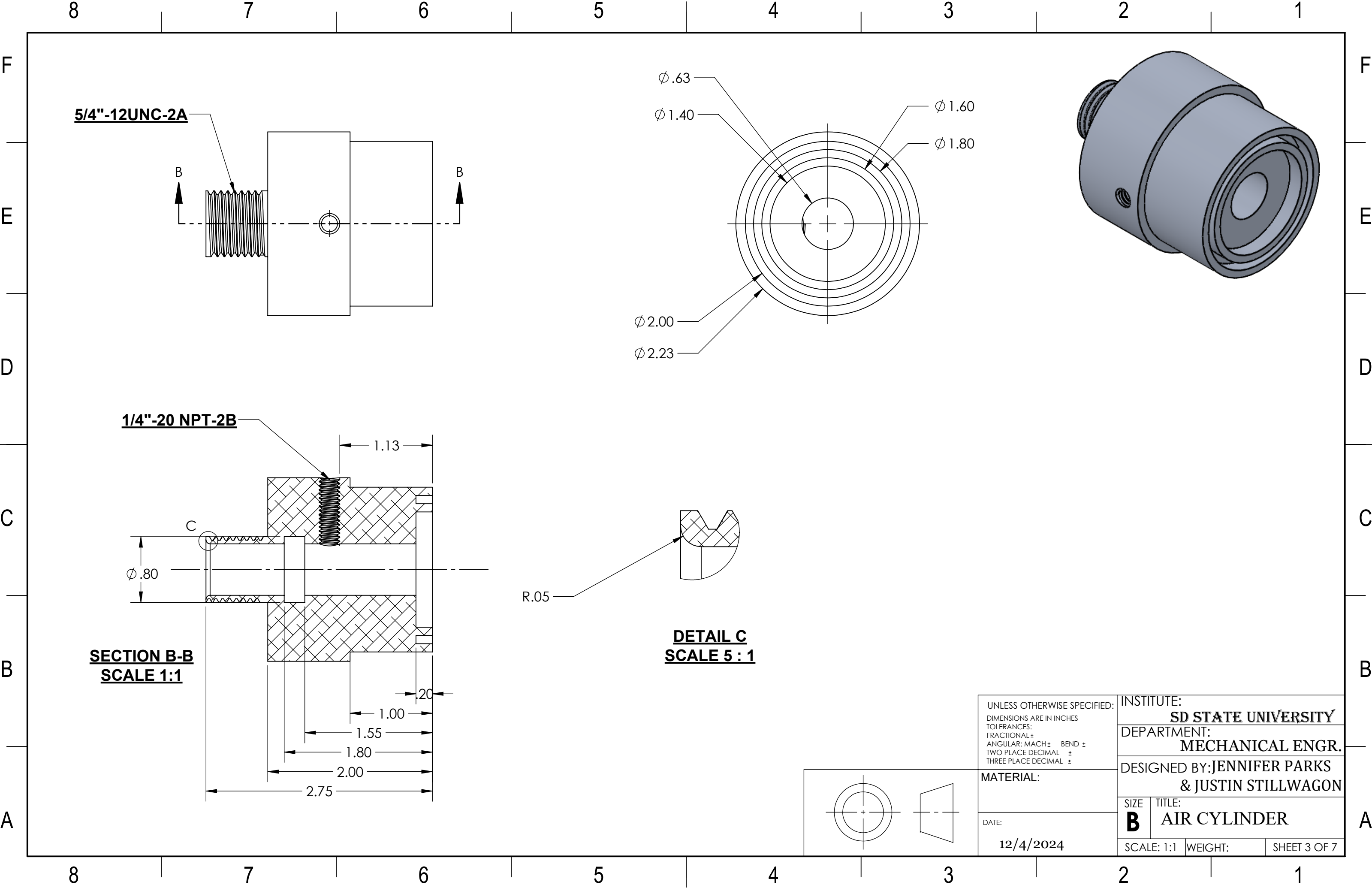
DEPARTMENT:
MECHANICAL ENGR.

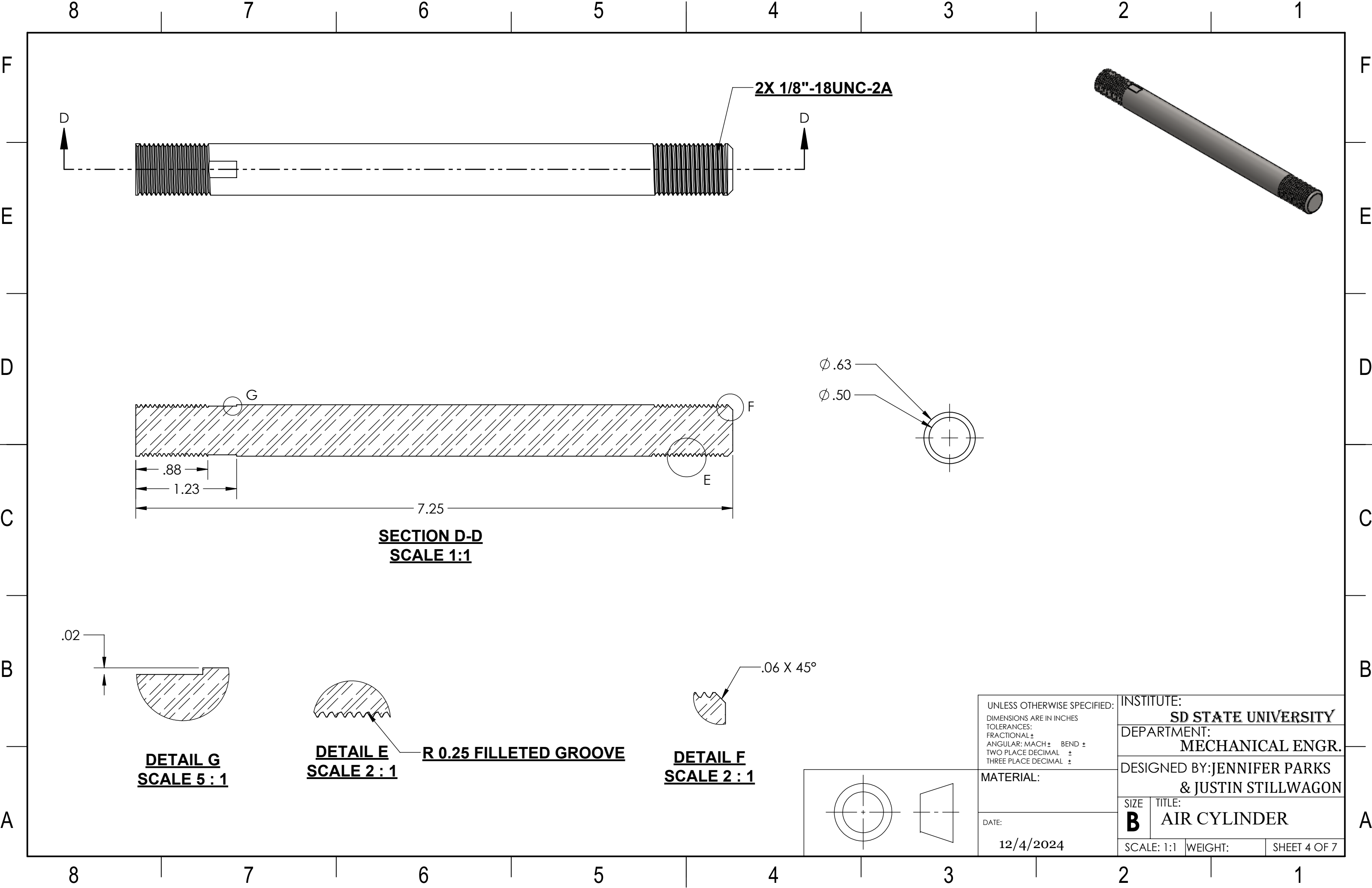
DESIGNED BY: JENNIFER PARKS
& JUSTIN STILLWAGON

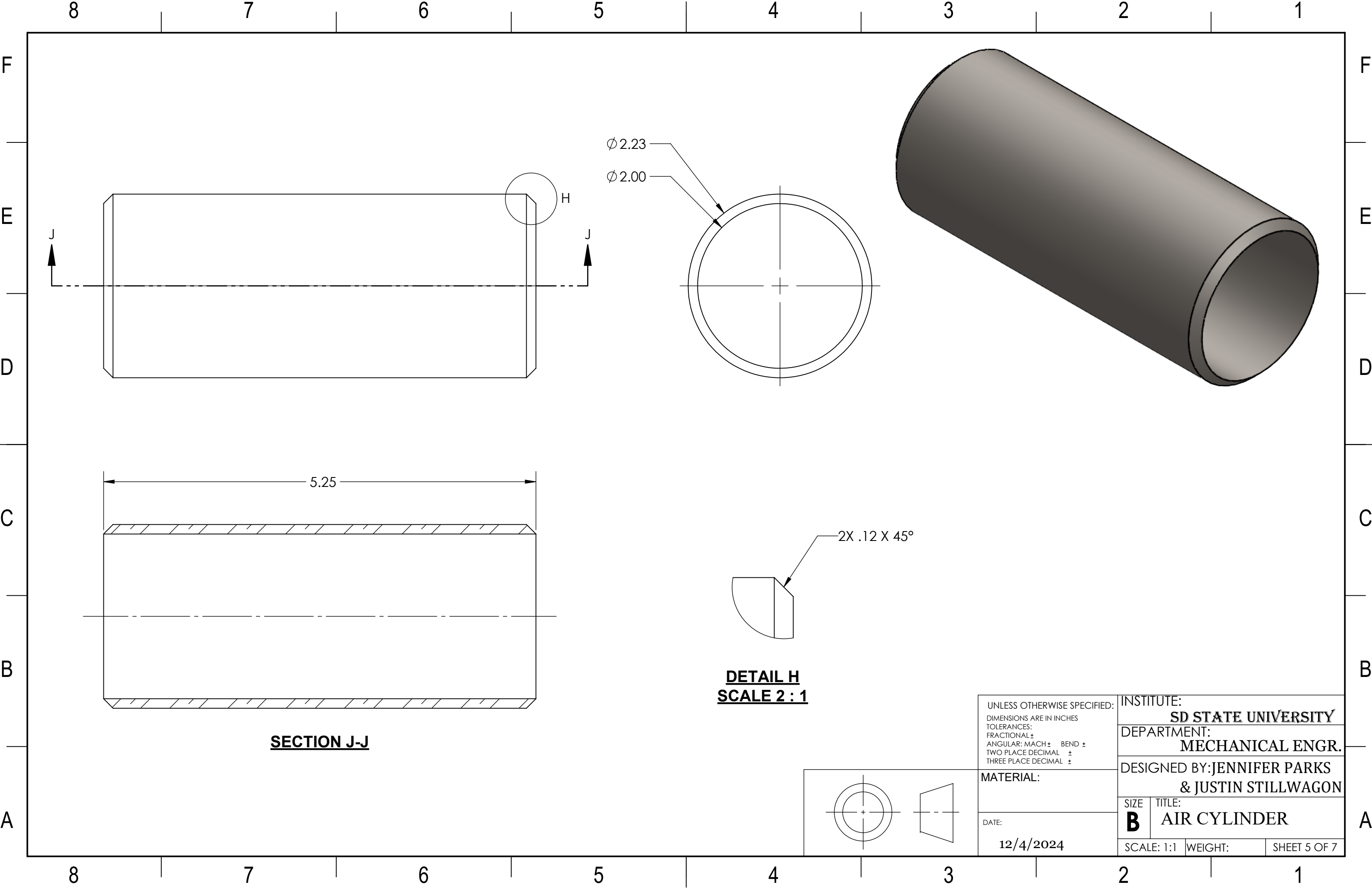
SIZE: **B** TITLE:
AIR CYLINDER

SCALE: 1:2 WEIGHT: SHEET 1 OF 7









Ø 2.23

Ø 2.00

H

J

J

5.25

2X .12 X 45°

DETAIL H
SCALE 2 : 1

SECTION J-J

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ±
ANGULAR: MACH ± BEND ±
TWO PLACE DECIMAL ±
THREE PLACE DECIMAL ±

MATERIAL:

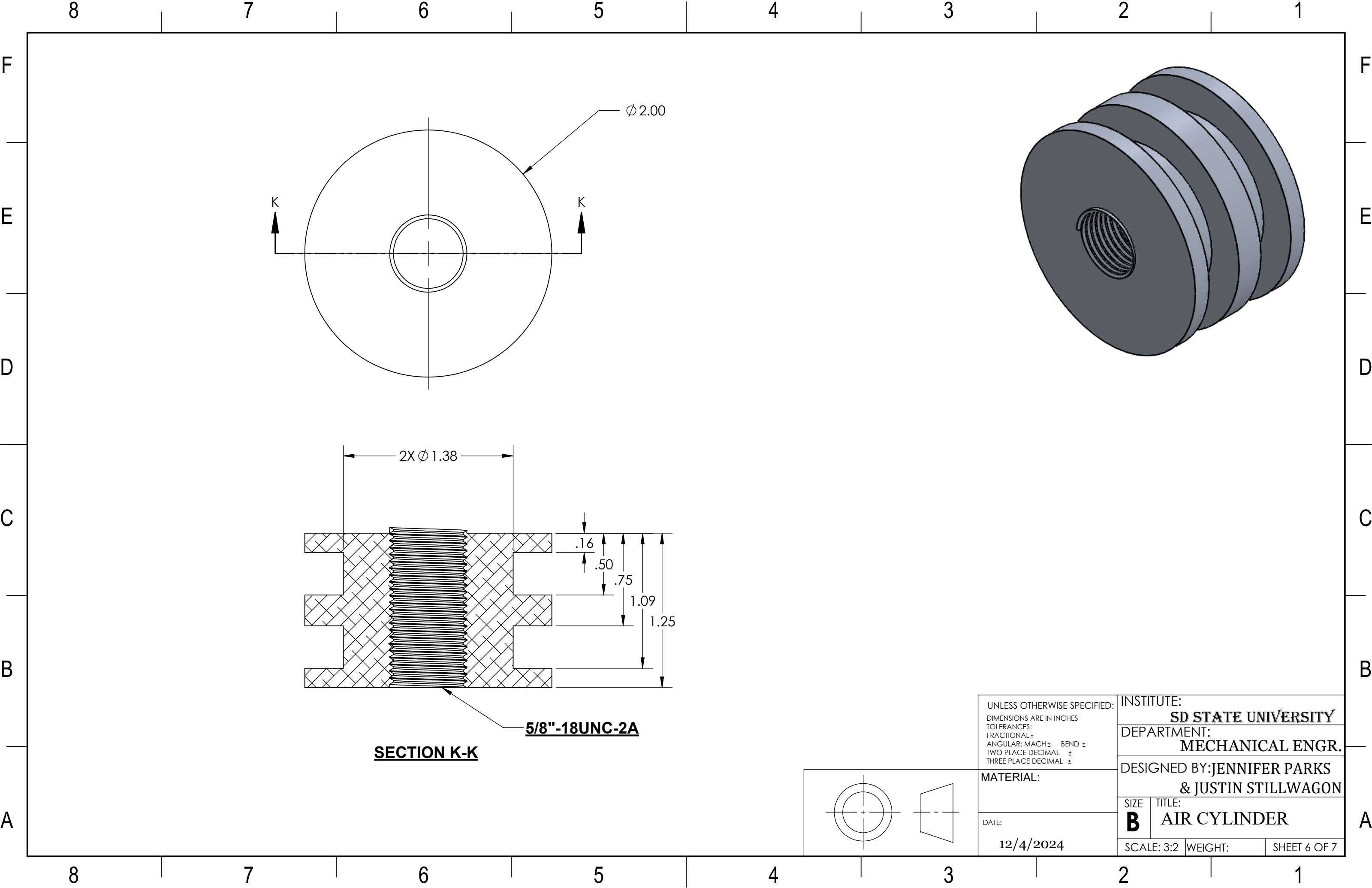
DATE:

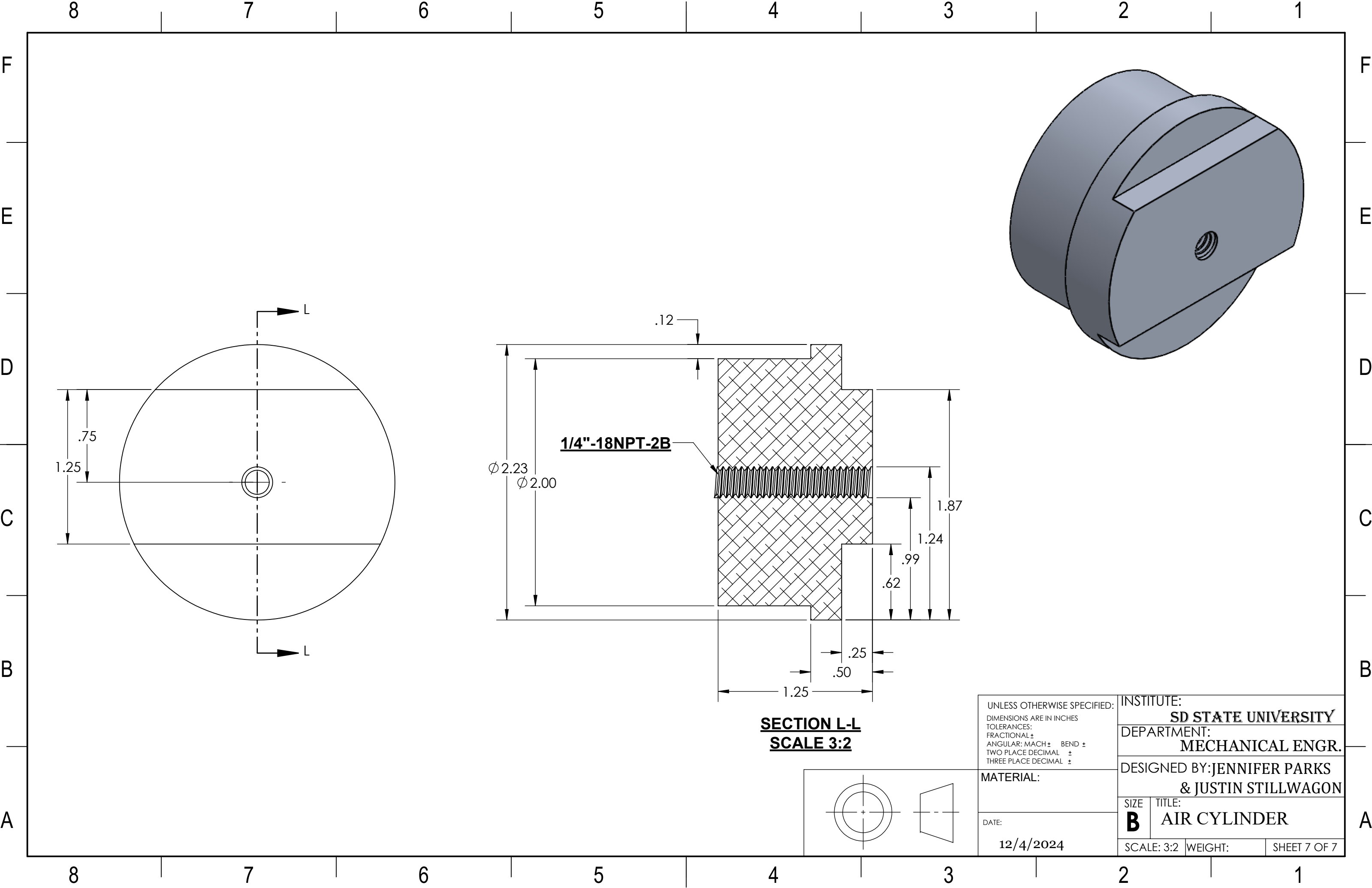
12/4/2024

INSTITUTE:
SD STATE UNIVERSITY
DEPARTMENT:
MECHANICAL ENGR.
DESIGNED BY: JENNIFER PARKS
& JUSTIN STILLWAGON

SIZE: **B** TITLE: **AIR CYLINDER**

SCALE: 1:1 WEIGHT: SHEET 5 OF 7





SECTION L-L
SCALE 3:2

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL \pm ANGULAR: MACH \pm BEND \pm TWO PLACE DECIMAL \pm THREE PLACE DECIMAL \pm	INSTITUTE: SD STATE UNIVERSITY		
	DEPARTMENT: MECHANICAL ENGR.		
	DESIGNED BY: JENNIFER PARKS & JUSTIN STILLWAGON		
MATERIAL:		SIZE	TITLE:
DATE: 12/4/2024		B	AIR CYLINDER
		SCALE: 3:2	WEIGHT:
		SHEET 7 OF 7	

