

INNOVATIVE PRODUCTS, INC.

520 BEACON PLACE
OKLAHOMA CITY, OK 73127
405-440-0010

samjohn@innovative123.com

REMOVABLE
SHIELD

TEST BAR,
SLEVE

FIXED
SHIELD

TEST BAR,
ROD

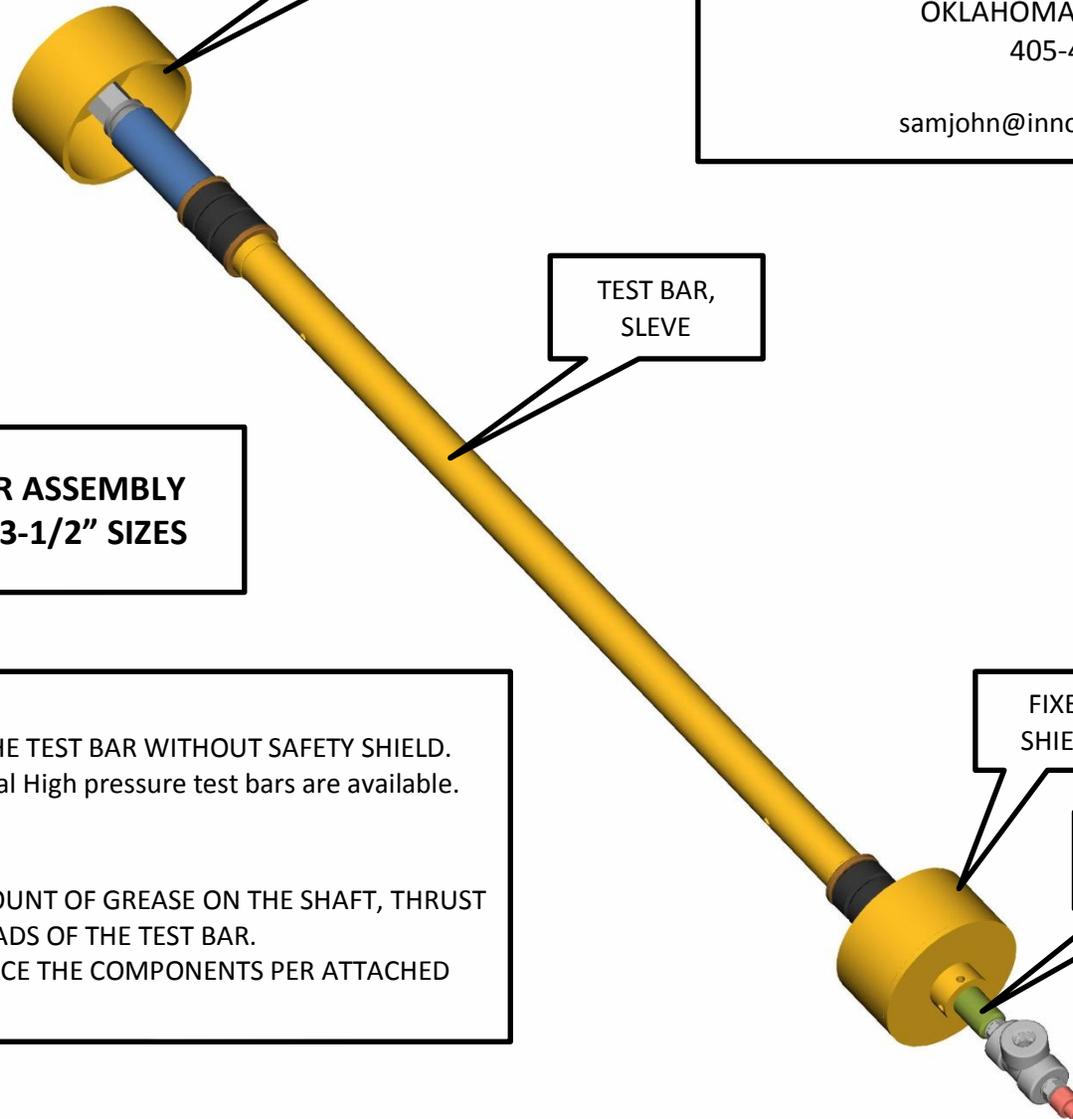
MANDRILL TEST BAR ASSEMBLY 2-3/8", 2-7/8" AND 3-1/2" SIZES

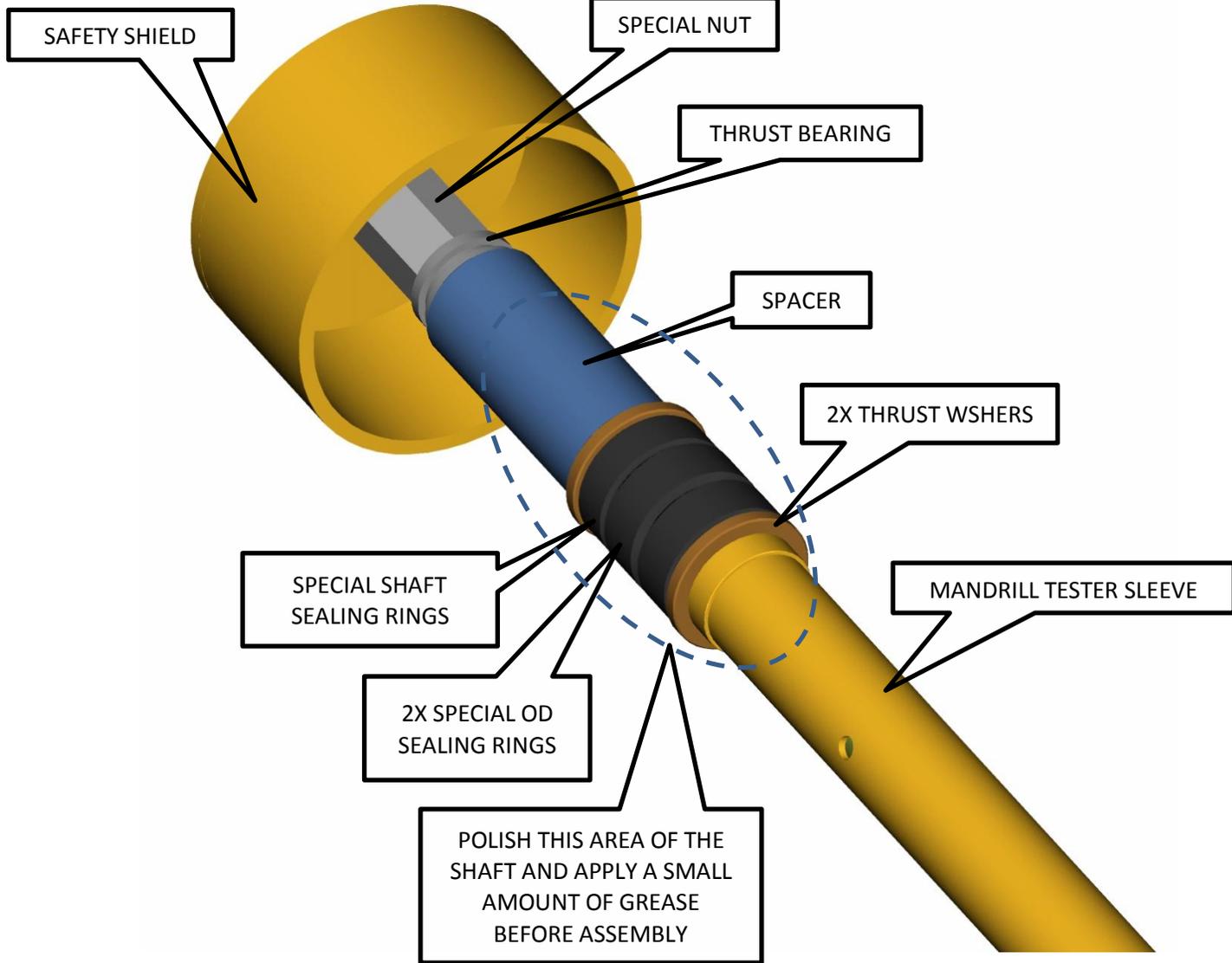
WARNING:

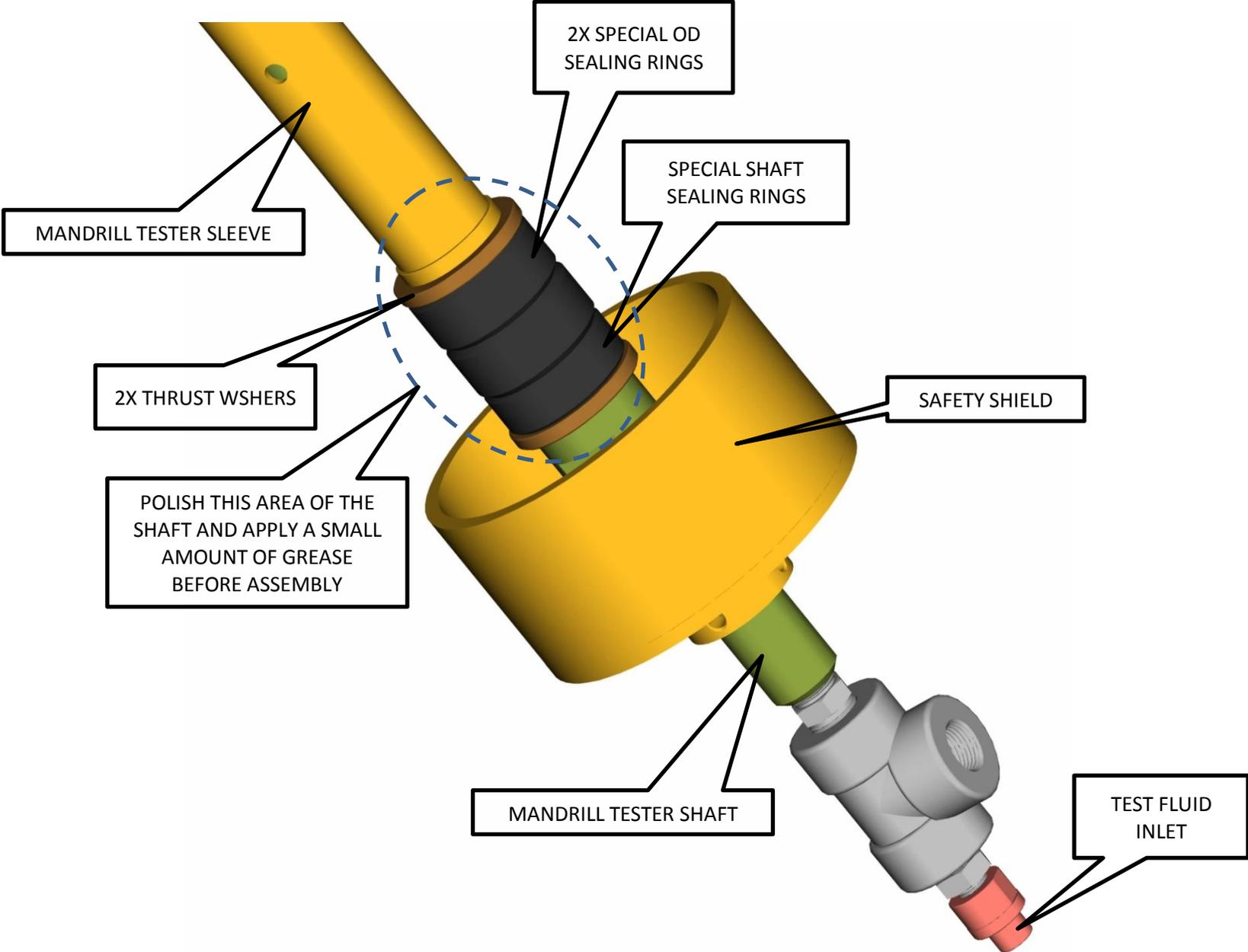
1. DO NOT OPERATE THE TEST BAR WITHOUT SAFETY SHIELD.
2. 5000 PSI MAX. Special High pressure test bars are available.

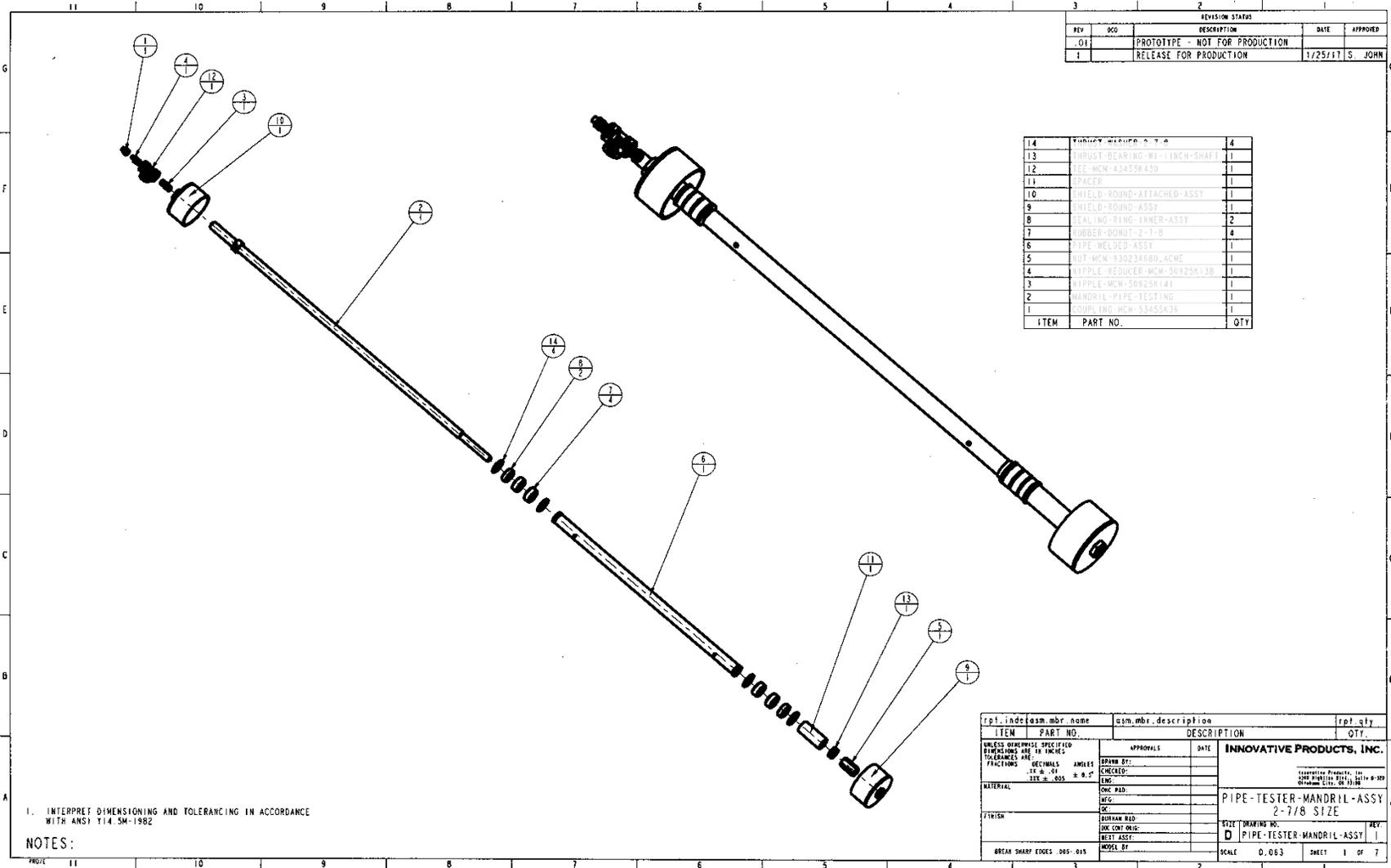
NOTE:

1. APPLY A SMALL AMOUNT OF GREASE ON THE SHAFT, THRUST BEARING AND THREADS OF THE TEST BAR.
2. REMOVE AND REPLACE THE COMPONENTS PER ATTACHED PICTURES.









| REVISION STATUS | | | | |
|-----------------|-----|--------------------------------|---------|----------|
| REV | QCO | DESCRIPTION | DATE | APPROVED |
| .01 | | PROTOTYPE - NOT FOR PRODUCTION | | |
| 1 | | RELEASE FOR PRODUCTION | 1/25/11 | S. JOHN |

| | | |
|------|------------------------------|-----|
| 14 | THRUST BEARING-W/ 1/2" SHAF | 4 |
| 13 | THRUST BEARING-W/ 1/2" SHAF | 1 |
| 12 | TEE-MCM-4345R43D | 1 |
| 11 | PACER | 1 |
| 10 | WELD-ROUND-ATTACHED-ASSY | 1 |
| 9 | WELD-ROUND-ASSY | 1 |
| 8 | SEALING-RING-INNER-ASSY | 2 |
| 7 | RUBBER-DONUT-2-7/8 | 4 |
| 6 | PIPE-WELDED-ASSY | 1 |
| 5 | WPT-MCM-93023AR80-ACME | 1 |
| 4 | WIPPLE-REDUCER-MCM-50925M13B | 1 |
| 3 | WIPPLE-MCM-50925M1A1 | 1 |
| 2 | MANDRIL-PIPE-TESTING | 1 |
| 1 | PIPE-TESTING-MCM-53455A3B | 1 |
| ITEM | PART NO. | QTY |

| ITEM | PART NO. | DESCRIPTION | QTY |
|---|----------|---|--|
| <small>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE DECIMALS UNLESS FRACTIONS .XX X .XX ± 0.0" SEE 8.055 ± 0.0"</small> | | | |
| MATERIAL | | <small>APPROVALS</small> <small>DATE</small> <small>INNOVATIVE PRODUCTS, INC.</small> <small>2400 W. 10TH ST. SUITE 100</small> <small>GRAND RAPIDS, MI 49508</small> | <small>PIPE-TESTER-MANDRIL-ASSY</small> <small>2-7/8 SIZE</small> |
| FINISH | | <small>DRWING NO.</small> <small>PIPE-TESTER-MANDRIL-ASSY</small> | <small>REV</small> <small>1</small> |
| BREATH SHARP EDGES 0.05-0.15 | | <small>SCALE</small> | <small>SHEET</small> 1 OF 7 |

1. INTERPRET DIMENSIONING AND TOLERANCING IN ACCORDANCE WITH ANSI Y14.5M-1982

NOTES: