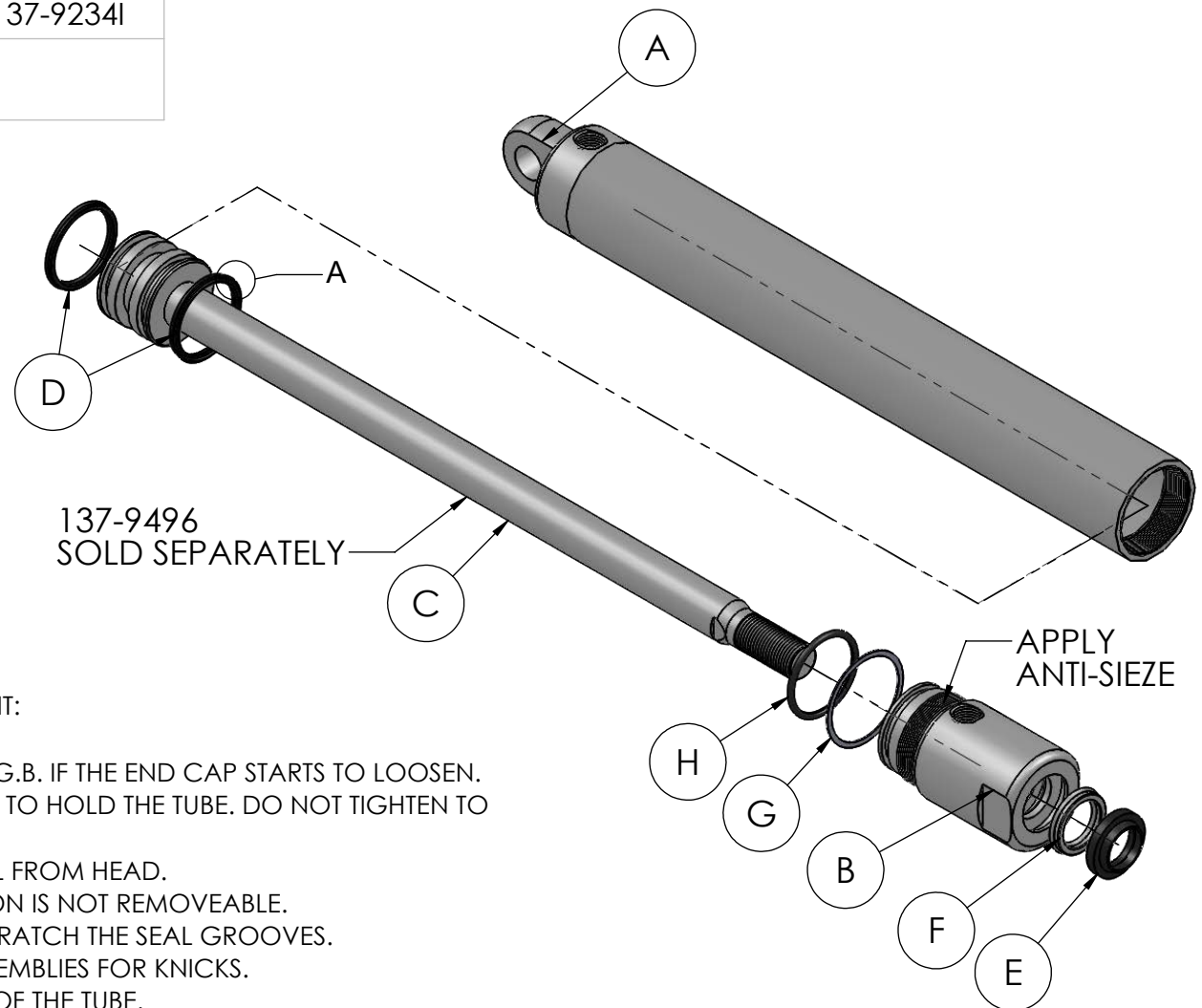
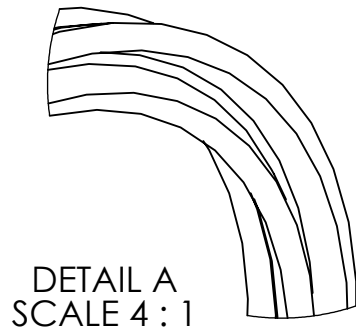


HARDIN MARINE 11 Industry Dr. Palm Coast, FL 32137
386-445-2500 / FAX 386-445-1122

PART NO.
137-9234I

TITLE:
9" MAYFAIR STEERING RAM
REBUILDING INSTRUCTIONS

www.hardin-marine.com



INSTALLATION INSTRUCTIONS USING 137-9248 SEAL KIT:

- 1) HOLD THE CAP END IN A VISE, FIG. A.
- 2) USING A 1-1/2 WRENCH REMOVE THE THE THE CAP, FIG.B. IF THE END CAP STARTS TO LOOSEN. JUST TIGHTEN IT BACK UP. USE PIPE WRENCH OR VISE TO HOLD THE TUBE. DO NOT TIGHTEN TO MUCH SO YOU DO NOT COLLAPSE THE RAM BORE.
- 3) REMOVE THE O-RING, ROD WIPER AND ROD SEAL FROM HEAD.
- 4) SLIDE OUT THE ROD AND PISTON, FIG. C. THE PISTON IS NOT REMOVEABLE.
- 5) REMOVE THE 2 OIL SEALS, BE CAREFUL NOT TO SCRATCH THE SEAL GROOVES.
- 6) CLEAN ALL PARTS. INSPECT ROD AND PISTON ASSEMBLIES FOR KNICKS.
- 7) USE POWER STEERING FLUID TO COAT THE INSIDE OF THE TUBE.
- 8) INSTALL NEW SEALS, FIG D, ON THE PISTON. SEE DETAIL A, SHOWS THE CUP SIDE OF THE FIELD IS FACING OUTWARD. THAT IS THE SAME OF THE OTHER SIDE.
- 9) WRAP THE RED SHIM PAPER AROUND THE PISTON SEALS AND INSTALL ROD AND PISTON INTO THE RAM. ONCE INSIDE THROW AWAY THE SHIM.
- 10) INSTALL ROD SEAL , FIG E, INTO THE SECOND GROOVE IN THE HEAD. THE CUP SIDE OF THE SEAL FACES INWARD.
- 11) INSTALL ROD WIPER, FIG. F, INTO THE FRONT GROOVE OF THE HEAD. THE ANGLED FACE OF THE SEAL FACES OUTWARD.
- 12) INSTALL PLASTIC SHIM, FIG. G, OVER THE THREADS.
- 13) INSTALL O-RING, FIG. H, INTO THE GROOVE ON THE INSIDE OF THE HEAD. COAT O-RING AND THE SEALS WITH POWER STEERING FLUID.
- 14) APPLY ANTI-SIEZE TO THE TUBE THREADS. SCREW ON THE HEAD AND TIGHTEN.
- 15) **BEFORE INSTALLING THE CYLINDER BACK INTO SERVICE THOROUGHLY TEST IT TO BE SURE IT FUNCTIONS PROPERLY AND THAT THERE IS NO LEAKAGE PAST ANY OF THE SEALS.**

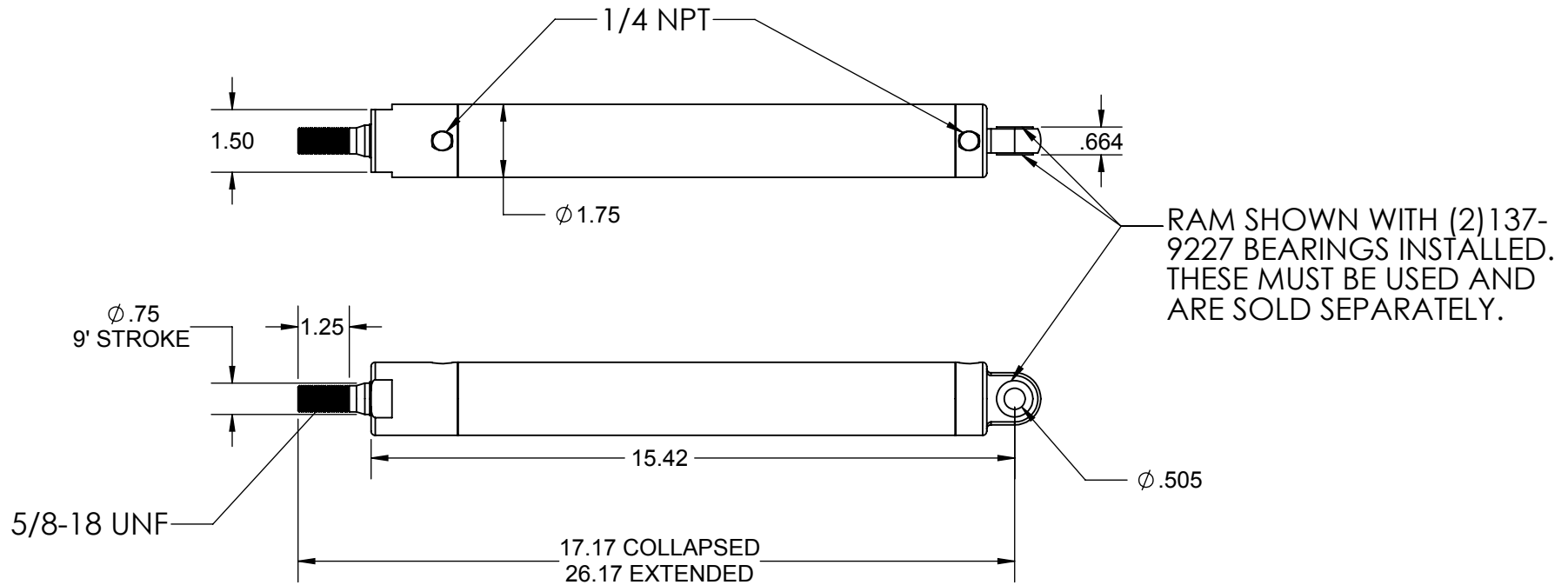
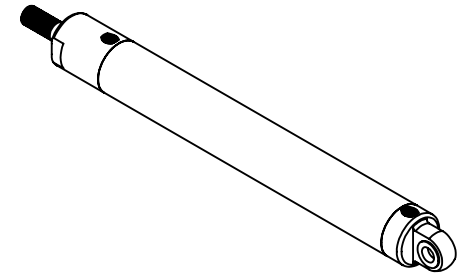
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PART NO.
137-9234

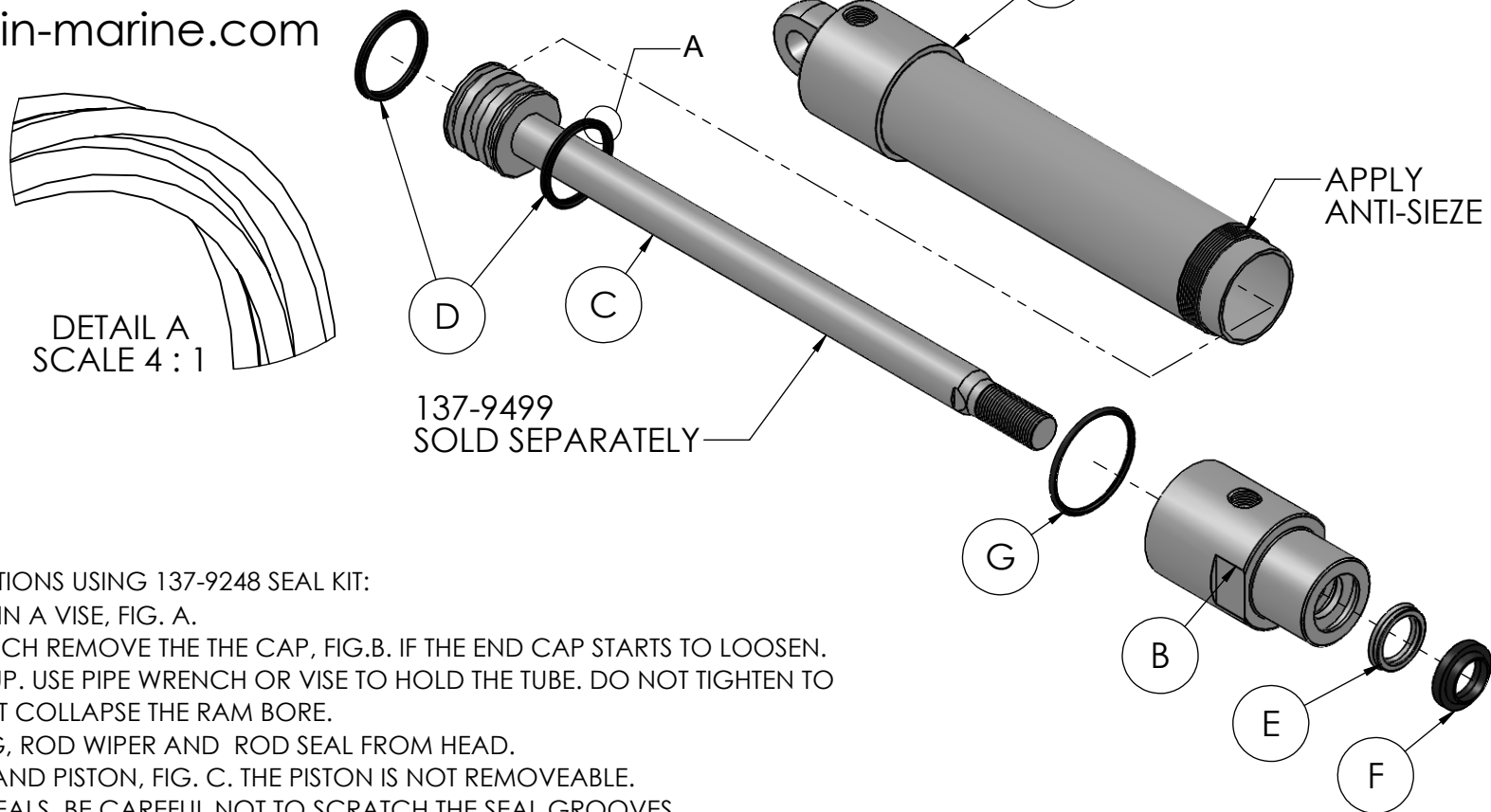
TITLE:
9" STEERING RAM w/ BUSHINGS

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TITLE: 7" MAYFAIR STEERING RAM
REBUILDING INSTRUCTIONS

www.hardin-marine.com



INSTALLATION INSTRUCTIONS USING 137-9248 SEAL KIT:

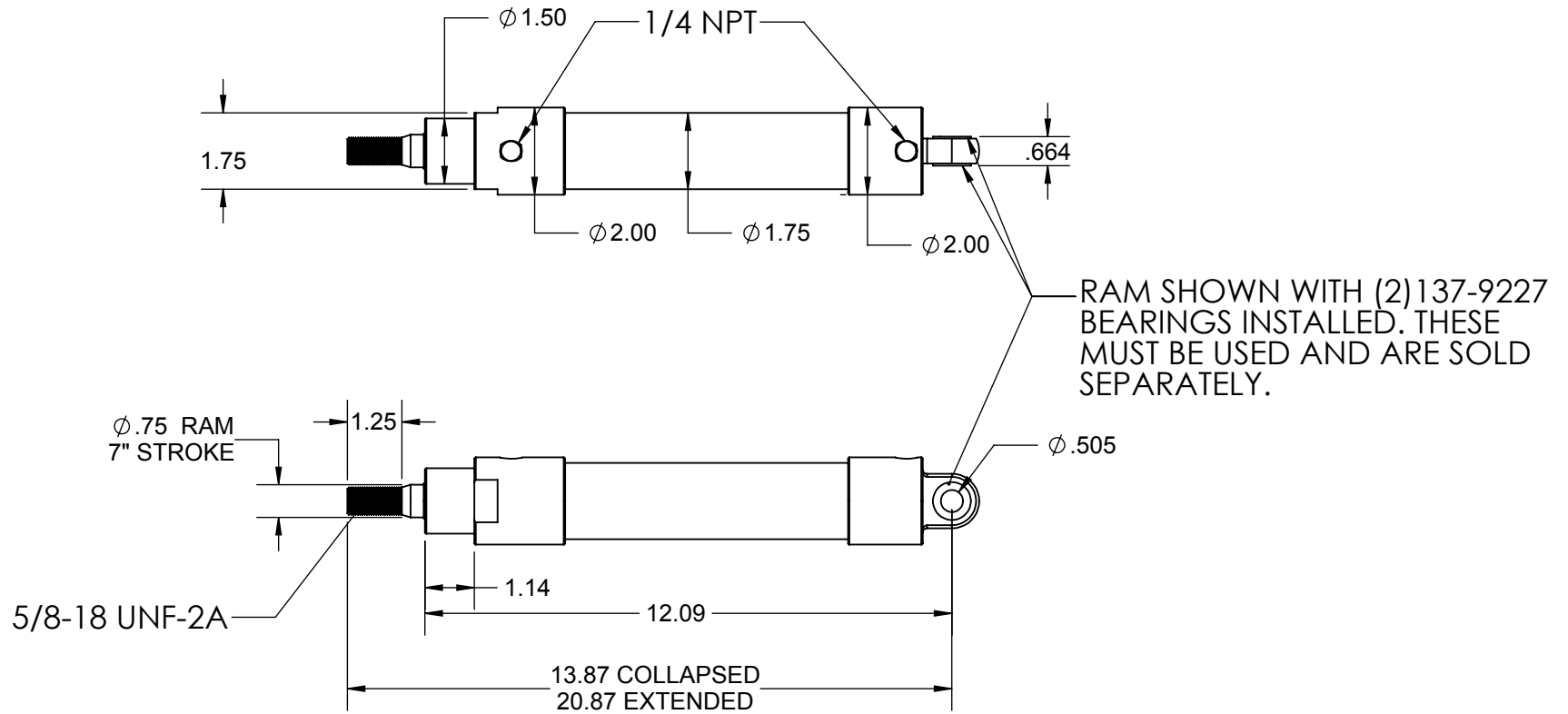
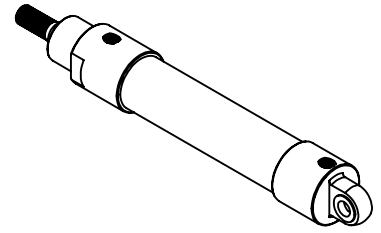
- 1) HOLD THE CAP END IN A VISE, FIG. A.
- 2) USING A 1-3/4 WRENCH REMOVE THE THE CAP, FIG.B. IF THE END CAP STARTS TO LOOSEN. JUST TIGHTEN IT BACK UP. USE PIPE WRENCH OR VISE TO HOLD THE TUBE. DO NOT TIGHTEN TO MUCH SO YOU DO NOT COLLAPSE THE RAM BORE.
- 3) REMOVE THE O-RING, ROD WIPER AND ROD SEAL FROM HEAD.
- 4) SLIDE OUT THE ROD AND PISTON, FIG. C. THE PISTON IS NOT REMOVEABLE.
- 5) REMOVE THE 2 OIL SEALS, BE CAREFUL NOT TO SCRATCH THE SEAL GROOVES.
- 6) CLEAN ALL PARTS. INSPECT ROD AND PISTON ASSEMBLIES FOR KNICKS.
- 7) USE POWER STEERING FLUID TO COAT THE INSIDE OF THE TUBE.
- 8) INSTALL NEW SEALS, FIG D, ON THE PISTON. SEE DETAIL A, SHOWS THE CUP SIDE OF THE FIELD IS FACING OUTWARD. THAT IS THE SAME OF THE OTHER SIDE.
- 9) WRAP THE RED SHIM PAPER AROUND THE PISTON SEALS AND INSTALL ROD AND PISTON INTO THE RAM. ONCE INSIDE THROW AWAY THE SHIM.
- 10) INSTALL ROD SEAL , FIG E, INTO THE SECOND GROOVE IN THE HEAD. THE CUP SIDE OF THE SEAL FACES INWARD.
- 11) INSTALL ROD WIPER, FIG. F, INTO THE FRONT GROOVE OF THE HEAD. THE ANGLED FACE OF THE SEAL FACES OUTWARD.
- 12) INSTALL O-RING, FIG. G, INTO THE GROOVE ON THE INSIDE OF THE HEAD. COAT O-RING AND THE SEALS WITH POWER STEERING FLUID.
- 13) APPLY ANTI-SIEZE TO THE TUBE THREADS. SCREW ON THE HEAD AND TIGHTEN.
- 14) **BEFORE INSTALLING THE CYLINDER BACK INTO SERVICE THOROUGHLY TEST IT TO BE SURE IT FUNCTIONS PROPERLY AND THAT THERE IS NO LEAKAGE PAST ANY OF THE SEALS.**

HARDIN MARINE 11 Industry Dr. Palm Coast, FL 32137
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PART NO.
137-9275

TITLE:
7" SHORT STEERING RAM w/ BUSHINGS

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