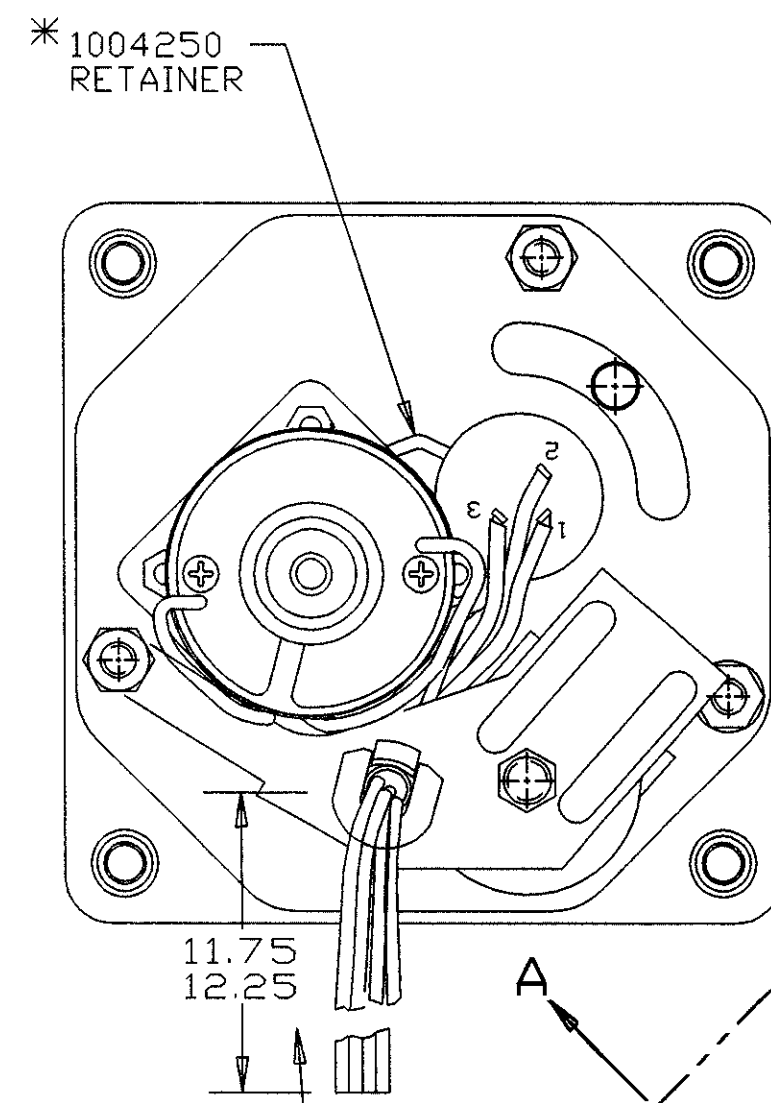


POTENTIOMETER MOUNTING PROCEDURE

- Mount pot retainer 1004250 to pot. 1004251.
 - Place wire retainer on pot, sloping away from body of pot.
 - Place nut on pot and tighten to 12-16 in/lbs.
 - Apply penetrating Locktite #290 or equivalent.
- Position pot assembly so that retainer straddles motor gear box.
- Insert shaft of pot into collet of output shaft. (Loosen set screw of collar if necessary. Do not remove collar.)
- Connect 8 volt (+ or - .08 volt) power supply to pot as follows:
 - 8 volts to pot terminal #3 (orange wire).
 - Ground to pot terminal #1 (white/org wire).
- Connect voltmeter to pot:
 - Positive (red) lead to pot terminal #2 (yellow wire).
 - Negative (black) lead to pot terminal #1 (white/org wire).
- Position servo arm parallel to mounting holes on mounting plate. Use tool to rotate pot shaft until voltmeter reads 4 volts (+ or - .04 volt).
- Tighten set screw in collar to 12-16 in/lbs.
- Re-check that voltmeter is still reading 4 volts (+ or - .04 volts). If not, loosen set screw and readjust.
- Viewing from the front, gradually rotate servo arm fully clockwise to the stop. Check for a smooth, continuous voltage increase during motion of servo arm and a reading of at least 7.44 volts at the stop.
- Viewing from the front, gradually rotate servo arm fully counter-clockwise to the stop. Check for a smooth, continuous voltage decrease during motion of servo arm and a reading of .48 volts or less at the stop.



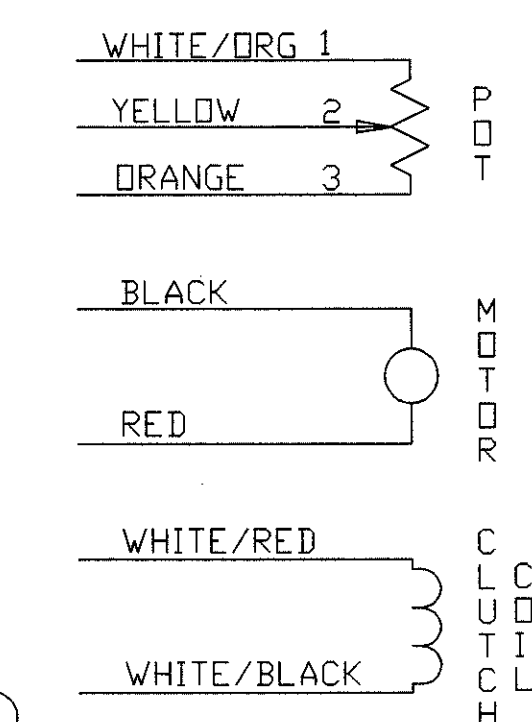
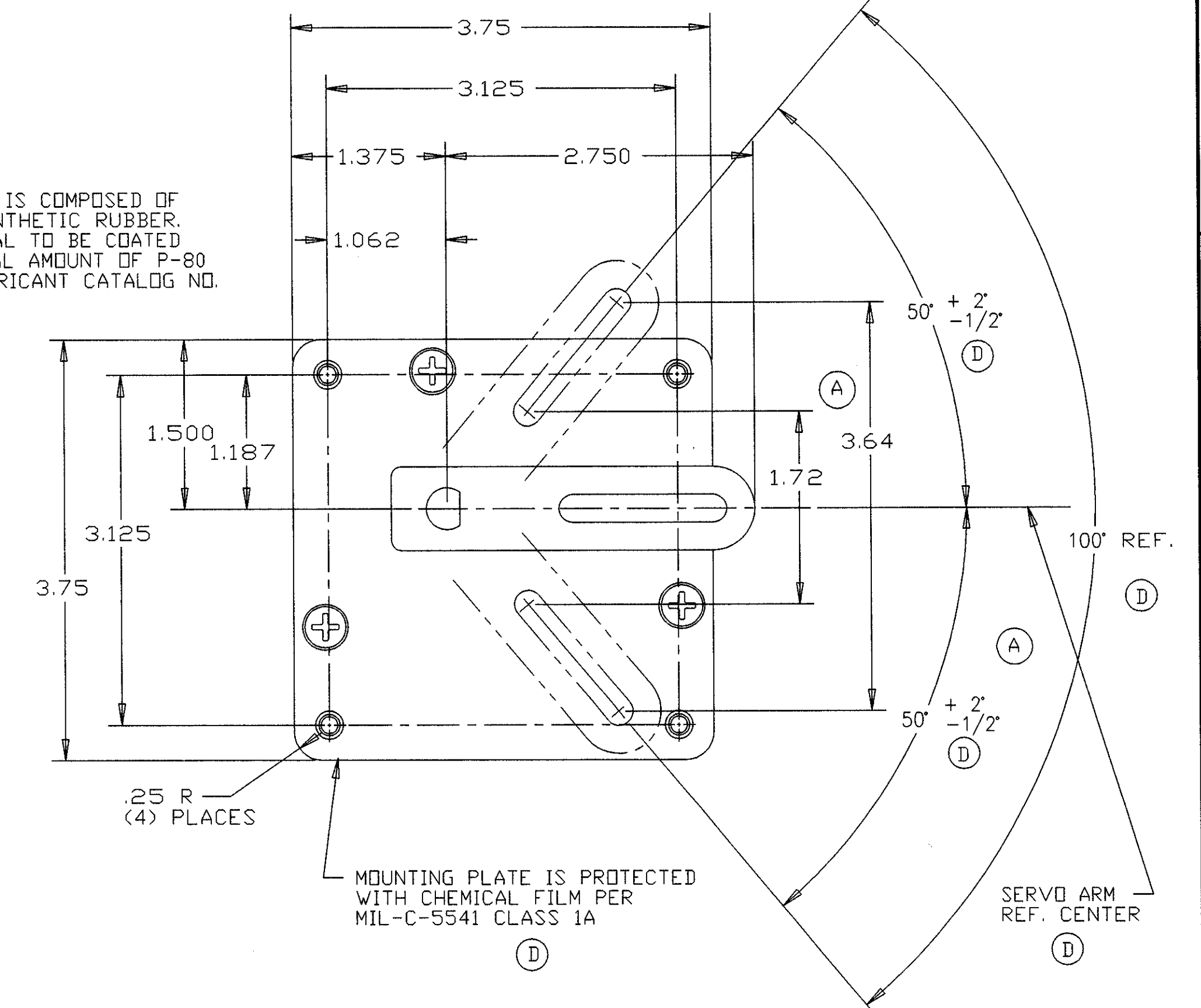
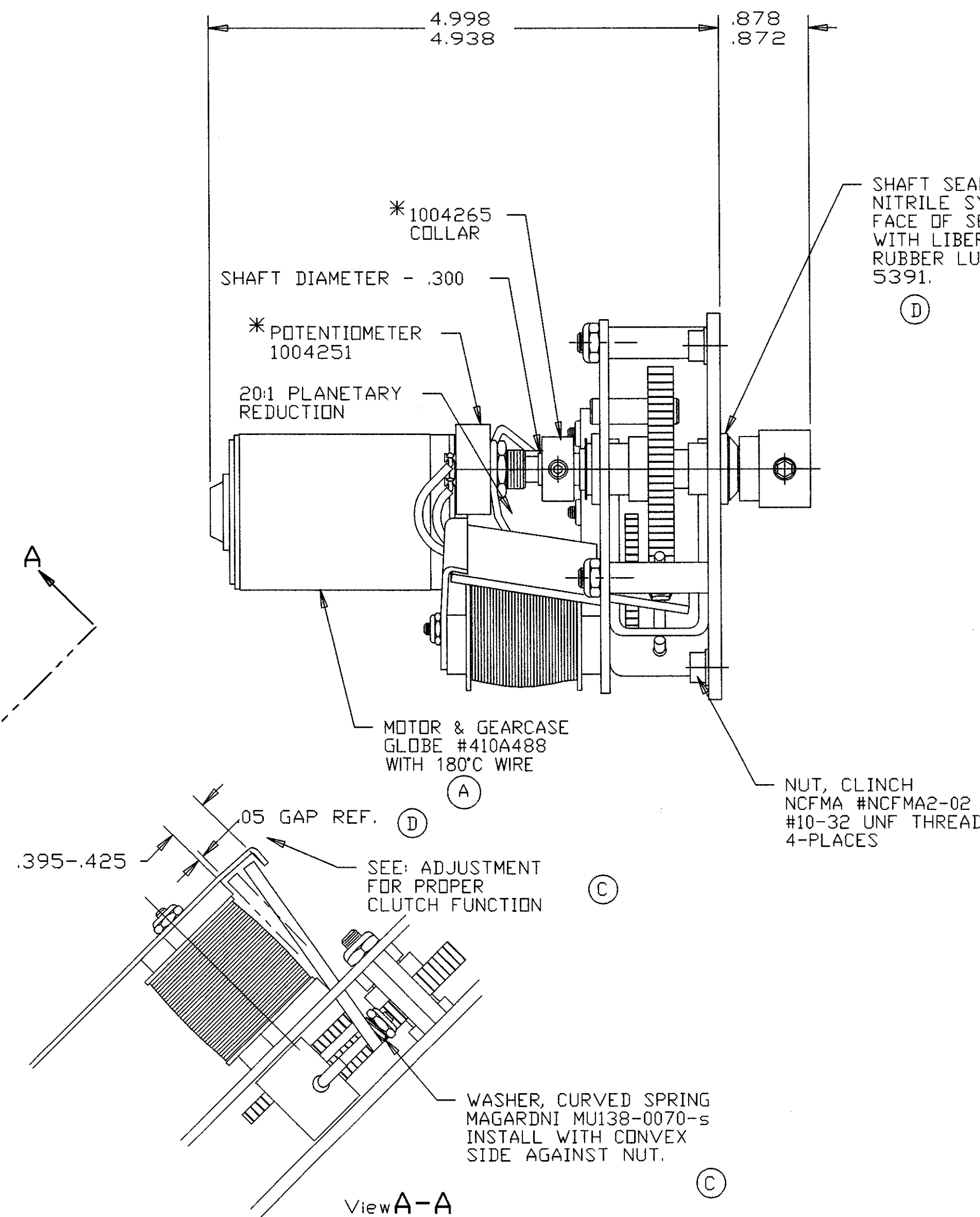
ADJUSTMENT FOR PROPER CLUTCH FUNCTION

Proper clutch adjustment gap is required to obtain clutch function per following specifications:

- Clutch must release completely after engagement with 12 VDC applied whether shaft is loaded or unloaded.
- Clutch must pull in completely with 8.5 VDC min. @ 75° F.

To adjust nominal gap, apply light pressure to clutch armature until gear teeth are fully engaged. Hold in this position while adjusting nut on link until a nominal gap of .05" is obtained between armature and pole piece. Check to specifications 1 and 2 above and adjust as necessary. After adjustment verify that output arm rotates freely with clutch disengaged.

- MOTOR VOLTAGE: 12VDC
- CLUTCH VOLTAGE: 12VDC
- MOTOR CURRENT: 0.5 AMP MAX. @ 12VDC NO LOAD
- CLUTCH CURRENT: 0.4 AMP MAX. @ 12VDC
- ROTATION: REVERSIBLE
- TOTAL GEAR RATIO: 419.6 to 1
- WITH A 60 IN/LB DYNAMIC LOAD, CLUTCH MUST REMAIN ENGAGED WHEN ENERGIZED
- OUTPUT SHAFT IS ENGAGED WHEN CLUTCH IS ENERGIZED



WIRE SPECIFICATIONS:
 POT: #22 AWG, TEFLON INSULATION
 MOTOR - #20 AWG, TEFLON INSULATION
 CLUTCH - #22 AWG, TEFLON INSULATION

SUPPLIER: GLOBE MOTORS
 2275 STANLEY AVE.
 DAYTON, OHIO 45404
 PART NO. 67A343

*SERVICEABLE PARTS

THIS UNIT DESIGNED AND DEVELOPED TO OPERATE IN A MARINE ENVIRONMENT WITH VARYING TEMPERATURE, SALT SPRAY, HUMIDITY AND VIBRATION CONDITIONS.

REV	ZONE	CH. NO.	DATE	REV	ZONE	CH. NO.	DATE
				E	---	24191	8-24-92
				D	---	24160	7-9-92
				C	---	24150	6-15-92
				B	---	H43201	2-26-91
				A	A-5	H43181	2-15-91

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MATERIAL	WEIGHT	UNLESS OTHERWISE SPECIFIED	DATE
HEAT TREAT	LBS. LBS. IN ³	MACHINED DIMENSIONS XX ±0.030 XXX ±0.010 XXXX ±0.005	12-18-90
SURFACE TREATMENT	FIRST USE	ALL ANGULAR TOLERANCES #1°	SCALE 1" = 1"
	ASSY. 1003466	GEOMETRIC TOLERANCING PER ANSI Y14.5M 1992	DRN. BS
	MODEL ETS17		CHK. R SCHENK
	NAME		APPD. G.L.P.

THIRD ANGLE PROJECTION
 SIMILAR TO

TWIN DISC
 INCORPORATED
 RACINE, WI 53403 - USA

1003435

SHEET 1 OF 1 REV E