

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE

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"CONFINE YOUR LETTER TO ONE SUBJECT ONLY" _____

July 24, 1981

TO: C. B. WORKMAN
FROM: T. L. CAPELETTI *TC*
SUBJECT: M/700 ADL RESTYLE - SCOPE MOUNTS

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This memo summarizes results of our discussions regarding status of scope mount designs currently being considered for the M/700 ADL Restyling program. A brief description of each design alternative is given below followed by a chart indicating status of the design.

Design Alternatives

1. Integral Base-Mount (John Linde's design)

a) Design Features:

- Base and lower mount ring a one piece design
- Attachment to receiver is by standard set screws threaded into holes drilled and tapped into receiver
- Two options considered for rear mount
 - i) Hidden Mount Screws - Must remove scope to remove base
 - ii) Accessible Mount Screws - Possible to remove base without disturbing scope

b) Comments:

- Have received cost estimates; Powder Metallurgy lowest cost
- Timing required to implement into production
 - i) Approximately 18 weeks to get first P/M components after release of design
 - ii) Approximately 27 weeks to tool up for Production
 - iii) Approximately 3 weeks for R&D Testing

2. Thumbwheel Mount for Dovetail Receiver

Design Features:

- Dovetail slot on top of receiver provides integral base
- Thumbwheel on base locks mount in position
- Can remove base without disturbing scope

3. Clamp Mount for Dovetail Receiver

a) Design Features

- Dovetail slot on top of receiver provides integral base
- Single transverse bolt tightens mount to both scope and receiver
- Two options being considered
 - i) Hinged Top - Prototypes in process
 - ii) Open Top - Being detailed for prototype fabrication

- b) Comment: Designs simple and should be very inexpensive; Open top design probably lowest cost

4. Screw-Eye Attachment

a) Design Features:

- Base and mount ring a one piece design
- Base contains studs which slide or screw into holes in the receiver and are held in position with a jam nut or qualified threads, etc.

- b) Comment: This design is in conceptual stage only; no engineering details available

5. Stud-Set Screw Attachment (e.g. Bushnell Design)

a) Design Features:

- Studs threaded into top of receiver provide locating pins for matching holes in scope mount base
- Base held in position by transverse set screws which seat against receiver studs

b) Comments:

- Bushnell has a similar design for handguns
- Design for rifles is in conceptual stage only; no engineering details are available

Status of Designs

Design Alternative	Status		
	Preliminary Design	Prototypes	Cost Estimates
1. Integral Base Mount			
a) Hidden Mount Screws	X	X	X (Type C) (i)
b) Accessible Mount Screws	X	X	X (Type C) (ii)
2. Thumbwheel Mount for Dovetail Receiver	X	X	
3. Clamp Mount for Dovetail Receiver			
a) Hinged Top	X	(iii)	
b) Open Top	X		
4. Screw-Eye Attachment			
5. Stud-Set Screw Attachment			

i) Front Mount: \$2.25/unit }
 Rear Mount: \$2.22/unit } \$4.47/unit

ii) Front Mount: \$2.25/unit }
 Rear Mount: \$2.33/unit } \$4.58/unit

iii) Prototypes in process

TLC:ws