

Issued 1953-10
Revised 1996-08
Reaffirmed 2012-11
Superseding ARP260C

Control Lever Connections (60° V Serrations)

RATIONALE

ARP260D has been reaffirmed to comply with the SAE five-year review policy.

1. SCOPE:

This SAE Aerospace Recommended Practice (ARP) provides the definition for a control lever connection with 60° "V" serrations for aircraft engine to aircraft power or control levers.

2. REFERENCES:

2.1 SAE Publications:

Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

AS269 Identification of Material for AN, MS, and AS Engine and Propeller Standard Utility Parts and Also for Company Parts
AS478 Identification Marking Methods

2.2 U.S. Government Publications:

Available from DODSSP, Subscription Services Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

MIL-S-7742
MIL-S-8879

2.3 ANSI Publications:

Available from ANSI, 11 West 42nd Street, New York, 10036-8002.

ANSI/ASME B46.1 Surface Texture

**PREPARED BY SAE COMMITTEE E-25,
GENERAL STANDARDS FOR AEROSPACE PROPULSION SYSTEMS**

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2012 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 877-606-7323 (inside USA and Canada)
Tel: +1 724-776-4970 (outside USA)
Fax: 724-776-0790
Email: CustomerService@sae.org
SAE WEB ADDRESS: <http://www.sae.org>

**SAE values your input. To provide feedback
on this Technical Report, please visit
<http://www.sae.org/technical/standards/ARP260D>**

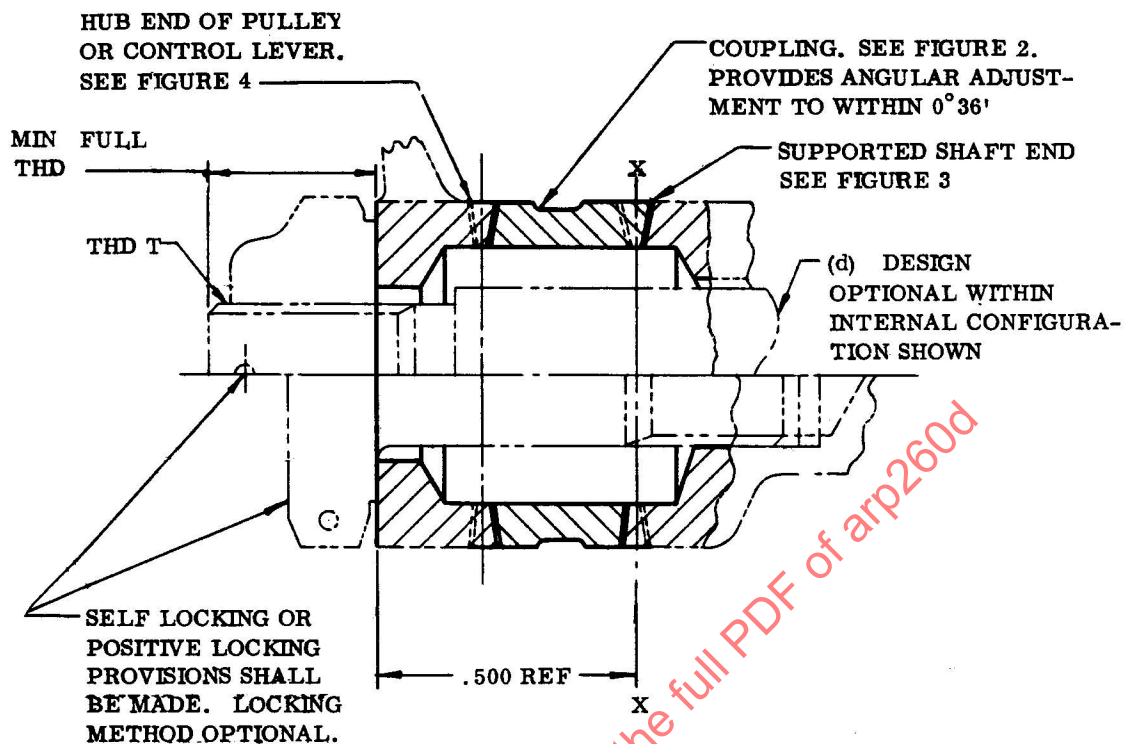


FIGURE 1 - General Installation - Aircraft Engine
to Aircraft Power or Control Lever or Pulley

TABLE 1 - Performance and Assembly Data

Thread T (a)	Max Applied (b) Torque lbf-in Class I	Max Applied (b) Torque lbf-in Class II	Max Applied Overhung Moment lbf-in	Min-Max (c) Assembly Torque lbf-in	Min Full Thd (d)
.250-28	750	620	100	70- 85	.300
.3125-24	750	620	250	125-170	.375
.375-24	750	620	500	225-300	.450
.500-20	750	620	1100	500-750	.530

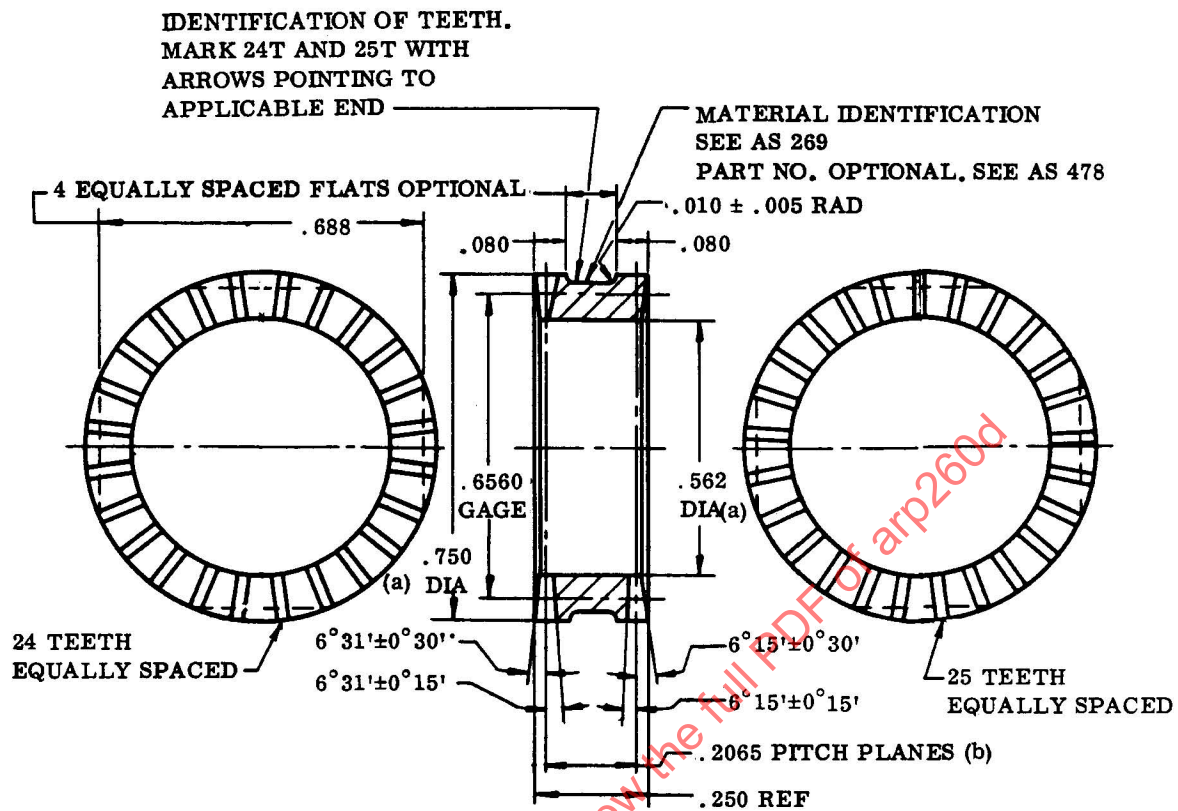
(a) Thread optional UNF-3A or 3B (MIL-S-7742) or UNJF-3A or 3B (MIL-S-8879).

(b) Class I Close tolerance (machined serrations).

Class II Loose tolerance (precision cast serrations).

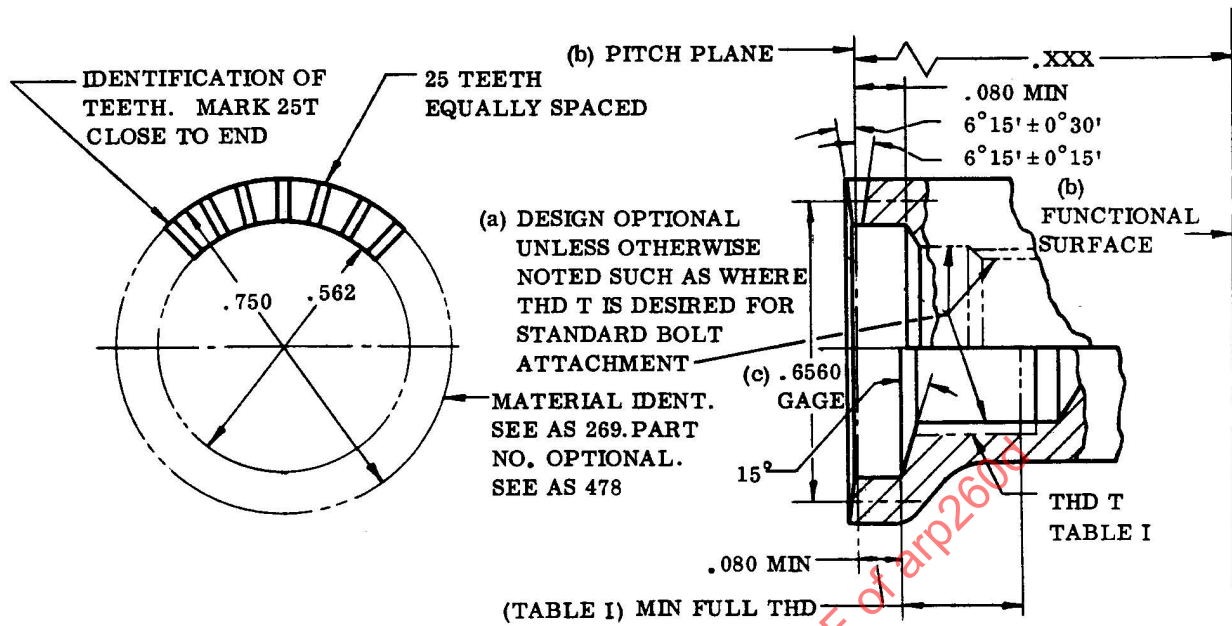
(c) Minimum assembly torque required to prevent tooth separation under combined torsion and bending loads applied about axis XX through lever or pulley side forces.

(d) Method of fastening assembly optional. Shaft, stud, or bolt may be used as shown. However, minimum full thread must be maintained. See Figure 3.



- (a) .562 and .750 diameters shall be concentric with gage diameter within .004 FIR.
- (b) Pitch planes of teeth shall be parallel within .004 FIR at .750 diameter.

FIGURE 2 - Coupling



- (a) Design may be bore for shaft, thread for stud or bolt, etc.; keyed, pinned, locked, or splined.
- (b) Pitch plane of teeth shall be square with bore, PD of spline, PD of thread, or parallel at .750 diameter with functional surface within .004 FIR.
- (c) .750 and .562 diameters shall be concentric with gage diameter within .004 FIR.

FIGURE 3 - Supported Shaft End