

# ARMOR-GRIP Suspension



## AGS 8 Series for AAC, AAAC, ACSR



Part Number (Single Unit)	Part Number (Double Unit)	Conductor Diameter Range (mm)	Colour Code
AGS-8097	AGS-8797	6.90 - 7.19	Blue
AGS-8098	AGS-8798	7.20 - 7.49	Red
AGS-8099	AGS-8799	7.50 - 7.69	Blue
AGS-8100	AGS-8800	7.70 - 7.99	Brown
AGS-8101	AGS-8801	8.00 - 8.29	White
AGS-8102	AGS-8802	8.30 - 8.69	Orange
AGS-8103	AGS-8803	8.70 - 8.99	Black
AGS-8104	AGS-8804	9.00 - 9.49	Red
AGS-8105	AGS-8805	9.50 - 9.89	Orange
AGS-8106	AGS-8806	9.90 - 10.29	Blue
AGS-8107	AGS-8807	10.30 - 10.59	Brown
AGS-8108	AGS-8808	10.60 - 10.99	Green
AGS-8109	AGS-8809	11.00 - 11.39	Black
AGS-8110	AGS-8810	11.40 - 11.89	White
AGS-8111	AGS-8811	11.90 - 12.19	Green
AGS-8112	AGS-8812	12.20 - 12.80	Blue

**Note:** 80 and 81 are single units, 87 and 88 are double units, 8 Series use a 16 mm bolt and a pressed metal housing with aluminium rods.

Double AGS Suspension is used where the turning angle is greater than 30° and up to 60°. A triangular Yoke Plate is used with Double AGS.



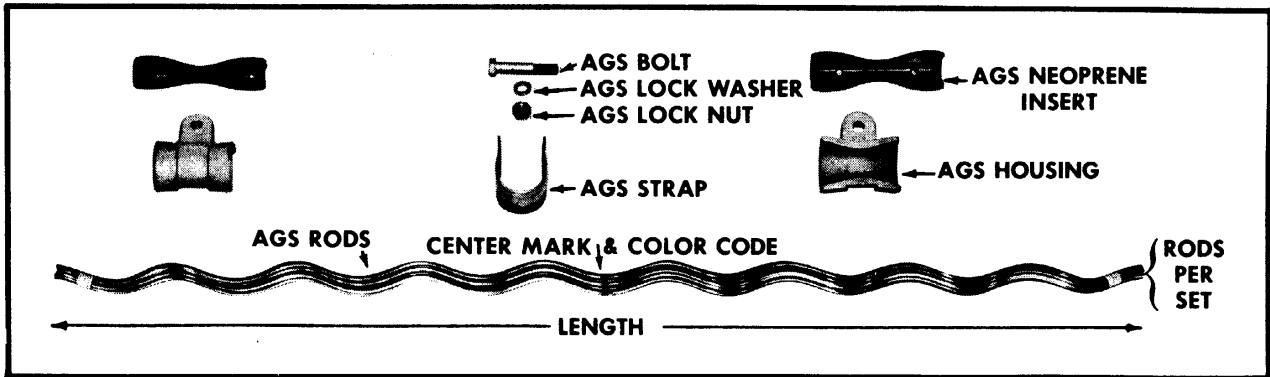
# APPLICATION PROCEDURE & SAFETY CONSIDERATIONS **PREFORMED LINE PRODUCTS**

**ARMOR-GRIP® Suspension**



NOVEMBER 1996

Completely read and understand this procedure before applying product. Special attention should be given to the Safety Considerations located on the last page. We advise the reader to review those considerations now, and then again during the general review of this procedure.

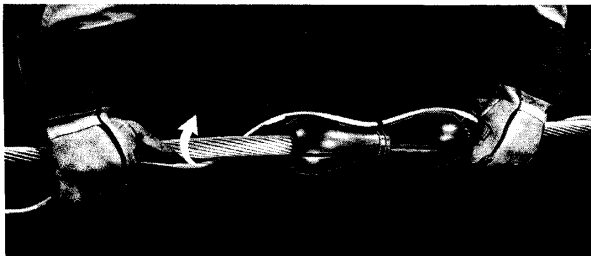


1. ARMOR-GRIP® Suspension nomenclature.



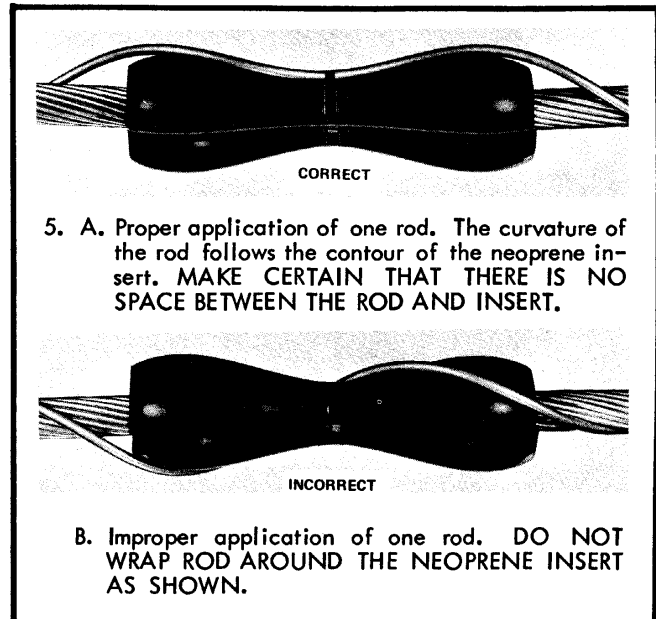
2. Plumb insulator string and mark conductor at center of sheave. Use felt marking pen or lumber crayon; do not scratch conductor. Lift the conductor beyond the ends of the rods to allow enough clearance for the application.

3. Align center marks of AGS Neoprene Inserts with center mark on conductor and tape in place with a thin layer of tape.

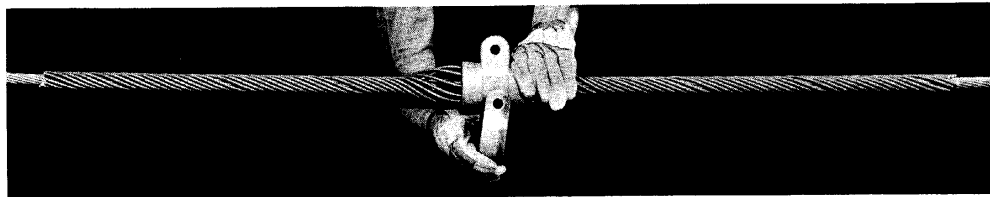


4. Center the AGS Rod on the insert. Apply sufficient length of rod (approximately two wraps) so that it will stay on the conductor.

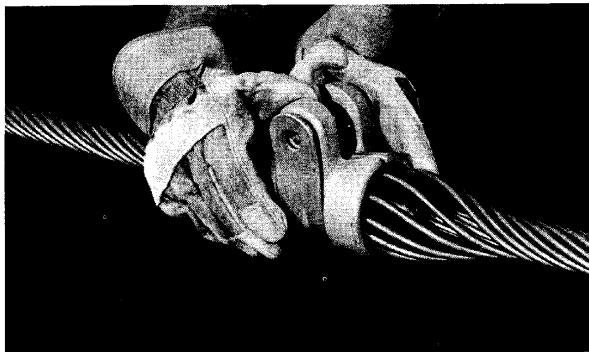
DO NOT DISTORT RODS.



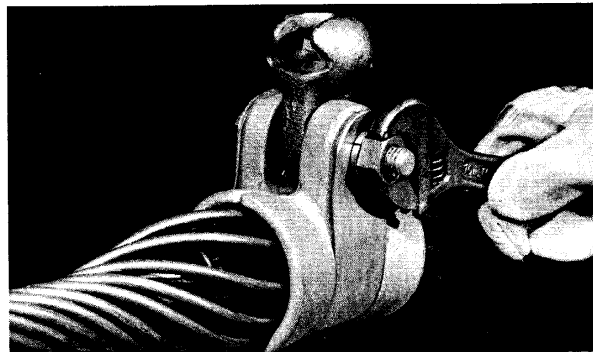
6. Apply all remaining rods evenly around neoprene insert. MAKE SURE THAT NO RODS ARE CROSSED. Each AGS Rod can be applied completely, or all rods can be applied partially as shown above. Make sure that all rod ends are snapped into place.



7. Place the two halves of the AGS Housing on either side of the center assembly. Slide the AGS Strap into position and with the heel of the hand tap firmly into place.



8. Spread the ears of the housing and tap strap into place again. This will align the holes so that the bolt may be inserted easily.



9. Tighten the nut until the lock washer becomes almost flat. DO NOT OVER-TIGHTEN. DO NOT SQUEEZE EARS OF AGS HOUSING AGAINST FITTING.

## GENERAL NOTES

1. ARMOR-GRIP® Suspension Rods are precision devices. To insure a tight assembly, they should be stored and handled carefully. To prevent distortion and damage, they should be installed as illustrated.
2. ARMOR-GRIP® Suspension Rods are NOT interchangeable with standard Armor Rods.
3. On some sizes of ARMOR-GRIP® Suspension there will appear to be enough gap between rods to apply an additional rod... BUT... all AGS Rods are packed in sets. Apply only the number of rods in the set.
4. Maximum line angle of deviation:
  - a. The single support ARMOR-GRIP® Suspension may be used on line angles up through 30°.
  - b. Use the double support ARMOR-GRIP® Suspension for line angles between 30° and 60°. Consult the Factory for an engineering recommendation regarding this application.
5. ARMOR-GRIP® Suspension Rods are factory matched; do not intermix rods from different sets.
6. Do not reverse rods end to end in any one set; that is, do not flip end over end.
7. The alignment of the rods should be maintained within 2 inches for voltages of 230 KV and lower; for 345 KV and above, the alignment of the ends of the rods should be maintained within ¾-inch.

## SAFETY CONSIDERATIONS

1. This application procedure is not intended to supersede any company construction or safety standards. This procedure is offered only to illustrate safe application for the individual. **CAUTION: FAILURE TO FOLLOW THESE PROCEDURES AND RESTRICTIONS MAY RESULT IN PERSONAL INJURY OR DEATH.**
  2. The rods of this product are intended for a single (one-time) use and for the specified application. However, the hardware components may be reused as desired if in good condition. **CAUTION: DO NOT REUSE RODS OR MODIFY THIS PRODUCT UNDER ANY CIRCUMSTANCES.**
  3. This product is intended for use by trained craftspeople only.
- This product **SHOULD NOT BE USED** by anyone who is not familiar with and trained in the use of it.
4. When working in the area of energized lines with this product, **EXTRA CARE** should be taken to prevent accidental electrical contact.
  5. For **PROPER PERFORMANCE AND PERSONAL SAFETY** be sure to select the proper size PREFORMED™ product before application.
  6. PREFORMED products are precision devices. To insure proper performance, they should be stored in cartons under cover and handled carefully.

**PREFORMED LINE PRODUCTS** 

P.O. Box 91129, Cleveland, Ohio 44101 • 440.461.5200 • www.preformed.com • e-mail: inquiries@preformed.com

SP2062-1

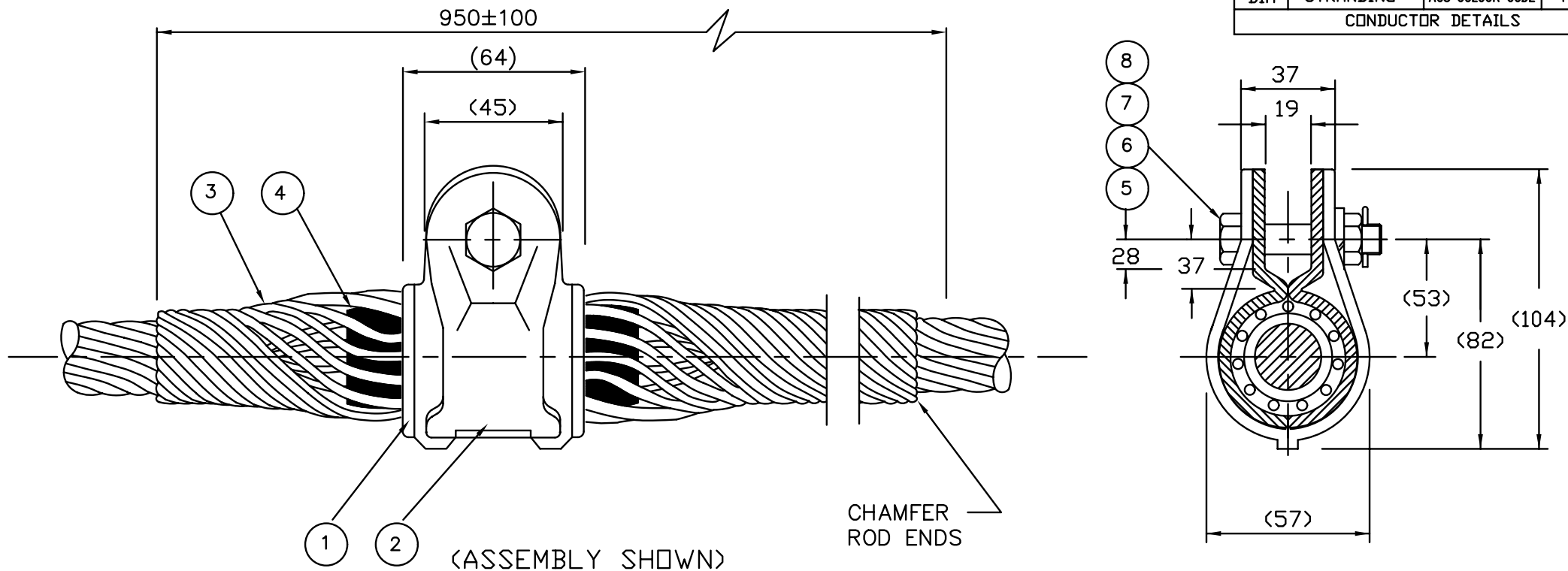
Litho in U.S.A.

NOTES

1. ALL DIMENSIONS IN MILLIMETRES.
2. TOLERANCES UNLESS OTHERWISE STATED:-
  - a. HOLE DIAMETRE  $\pm 0.5\text{mm}$
  - b. LINEAR DIMS. UP TO 30mm  $\pm 1.5\text{mm}$
  - c. LINEAR DIMS. OVER 30mm  $\pm 5\%$  UP TO A MAX. OF 5mm.
3. BRACKETED DIMENSIONS DO NOT AFFECT INTERCHANGEABILITY OR COUPLING AND ARE FOR GUIDANCE ONLY.
4. MATERIAL TO AS1154
5. GALVANIZING TO AS/NZS 4680
6. NOMINATED HOLDING TENSION - 2.6kN
7. MINIMUM VERTICAL FAILING LOAD - 22.9kN

SP HPA	8	SPLIT PIN - HUMPBAC	1	STAIN. STEEL	AS 1154
GSW-16	7	M16 SPRING WASHER - GAL	1	GAL. STEEL	AS 1968
GHN-16	6	M16 NUT	1	GAL. STEEL	AS 1112
GCB-16065	5	M16 X 65 HEX BOLT	1	GAL. STEEL	A4-01-016
AGNI-55051	4	AGS INSERT	2	NEDPRENE	A4-23-184
AGSR-8109	3	AGS RODS $\phi 3.55$	11/SET	ALUM. ALLOY	A4-79-007
AGSS-65246	2	AGS STRAP	1	GAL. STEEL	A4-23-226
AGSH-65245	1	AGS HOUSING	2	GAL. STEEL	AS DRAWN
CAT No.	ITEM	DESCRIPTION	REQ.D	MATERIAL	REF No.


11.3	3/4/3.75 AACSR/AC	BLACK	---
11.3	7/3.75 AAC/AAAC	BLACK	MARS
11.3	6/1/3.75 ACSR/GZ	BLACK	BANANA
DIA	STRANDING	AGS COLOUR CODE	NAME
CONDUCTOR DETAILS			



A	CW	18/10/91	C	DG	15/8/05
CHK	MH	22/6/91	CHK		
INITIAL ISSUE		A6889			
DSC NO.8237					

THIS DRAWING IS THE EXCLUSIVE PROPERTY OF PREFORMED LINE PRODUCTS (AUSTRALIA). REPRODUCTION THEREOF IS PROHIBITED AND IS TO BE USED ONLY WITH THE EXPRESSED PERMISSION OF THE COMPANY

PART No: AGS-8109	
ARMOR GRIP SUSPENSION	
PASSED	DATE

	<b>PREFORMED LINE PRODUCTS (AUSTRALIA) PTY. LTD.</b>	
	SCALE N.T.S.	DRAWING NUMBER <b>023-005-RD</b>



**PREFORMED  
LINE PRODUCTS  
(AUSTRALIA) PTY LTD**  
A.B.N. 27 004 533 877

**PLP (AUSTRALIA) PTY LTD  
ENGINEERING DEPARTMENT**

**DATE – 23<sup>rd</sup> FEBRUARY 2003**

**TYPE TEST REPORT NO: T7433  
TEST REFERENCE NO: T03/1  
PAGE 1 of 4**

**MECHANICAL STRENGTH TYPE TEST**

**ON:**

**ARMOUR GRIP SUSPENSION FOR “BANANA” CONDUCTOR**

**PART NO. AGS - 8109**

**Testing Officer:** *M. Laws* (Mike Laws)

**190 Power Street Glendenning NSW 2761 AUSTRALIA  
Phone: 8805 0000, INTL (612) 88050000  
Fax: 8805 0090, INTL (612) 88050090**

**THE QUALITY SYSTEM OF PLP AUSTRALIA HAS BEEN CERTIFIED TO  
AS/NZS ISO9001:2000 BY LLOYD’S REGISTER QUALITY ASSURANCE**

**Fittings and Accessories for Power and Communication.  
Engineered Plastics and Extrusions.  
Data Communication Products.**