A Complete Line of Insulation Equipment for Antenna Masts and Towers

GUY STRAIN INSULATORS

BASE INSULATORS

-

LIGHTING TRANSFORMERS

DECCA RADAR

AUSTIN INSULATOR DIVISION

Decca Radar Canada offers a range of proven products, technological experience, and a Canadian design and production capability as follows:

MARINE

MARINE RADAR RADAR ANCILLARY EQUIPMENT HARBOUR RADAR SYSTEMS MARINE TRAFFIC CONTROL SYSTEMS MARINE AUTOPILOTS AND STEERING SYSTEMS NAVIGATIONAL AIDS ENGINE ROOM AUTOMATION SYSTEMS OCEANOGRAPHIC EQUIPMENT

AVIONICS

AIRBORNE DOPPLER NAVIGATION SYSTEMS AIRPORT SURFACE MOVEMENT INDICATION RADARS NON-DIRECTIONAL M.F. BEACONS SPECIAL PURPOSE RADAR SYSTEMS

INDUSTRIAL AND SCIENTIFIC

MICROWAVE INSTRUMENTS WAVEGUIDE AND CO-AXIAL COMPONENTS FERRITE DEVICES THIN-FILM AND THICK-FILM HYBRID MICROELECTRONICS ELECTRON SPIN RESONANCE SPECTROMETERS NUCLEAR QUADRUPLE RESONANCE SPECTROMETERS LASER VELOCIMETERS

RADIO TRANSMISSION

ANTENNA LIGHTING TRANSFORMERS ANTENNA GUY STRAIN INSULATORS ANTENNA BASE INSULATORS

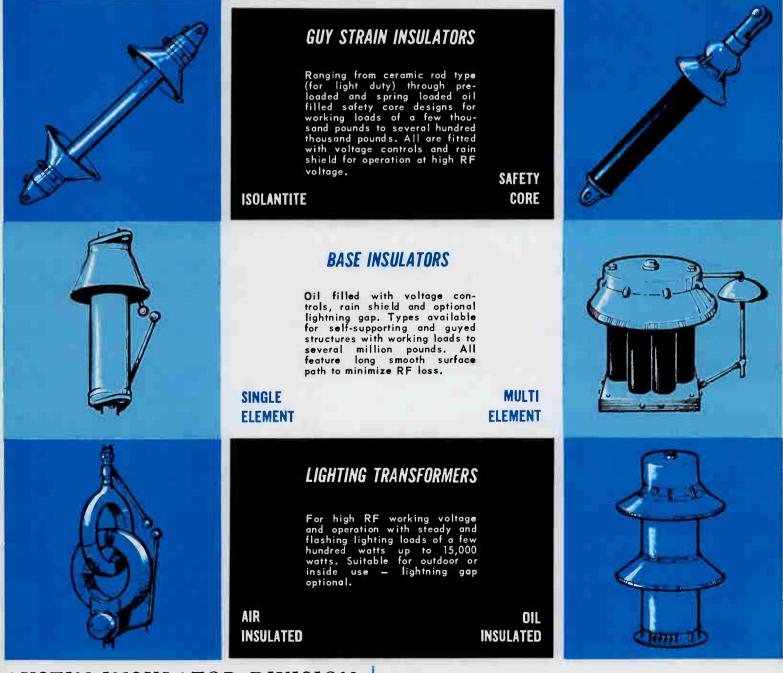
SYSTEMS STUDIES & MANAGEMENT * SYSTEMS DESIGN & ENGINEERINGINSTALLATION*MAINTENANCE*OVERHAULCOMPONENT ANDEQUIPMENTDEVELOPMENTANDMANUFACTURE

AUSTIN INSULATOR DIVISION

A Complete Line of Insulation Equipment for Antenna Masts and Towers

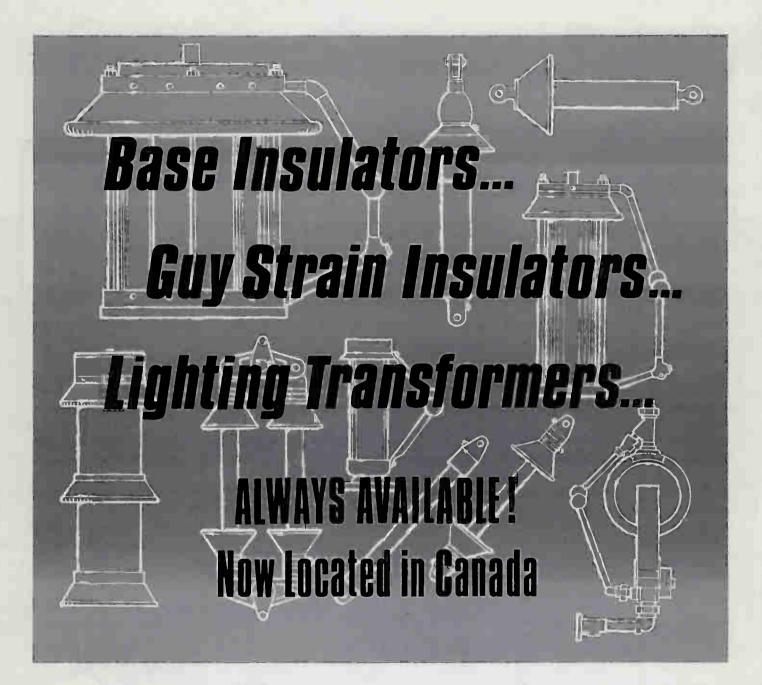
Austin insulators were first manufactured by A.O. Austin of Barberton Ohio who, with 60 years of experience in the insulator field, gained a worldwide reputation for the highest quality radio tower and mast insulators. The entire plant, inventory and engineering designs were purchased by Decca Radar and moved to our modern production facilities in Toronto in early 1971.

A brief listing of these quality products follows – further detailed information available on request.



AUSTIN INSULATOR DIVISION DECCA RADAR CANADA (1967) LIMITED

JULY 1971



AUSTIN Still the Best Insulators after 40 years of **PROVEN SERVICE**

AUSTIN INSULATOR DIVISION 23 Six Point Road. Toronto 18, Ontario.



DECCA RADAR CANADA (1967) LIMITED Telephone: (416) 239-1161 Telex: 02-2098

DECCA RADAR AUSTIN INSULATOR DIVISION

SPECIFICATION DETAILS

WHEN READING INSULATOR SPECIFICATIONS, IN CONNECTION WITH THEIR USE ON RADIO TOWERS OR MASTS, IT IS IMPORTANT THAT THE SAME INTERPRETATION OF THE VARIOUS TERMS BEING USED IS UNDERSTOOD BY ALL CONCERNED.

THE FOLLOWING ARE THE MEANING OF TERMS USED IN AUSTIN LITERATURE. IF YOU APPLY ANY OTHER INTERPRETATION PLEASE PROVIDE FULL DETAILS WHEN REQUESTING A PROPOSAL OR QUOTATION.

DEFINITIONS:

MAXIMUM WORKING DOWNLOAD (SELF SUPPORTING TOWERS OR GUYED MASTS)

THIS IS THE VERTICAL (DOWNWARD) THRUST IN LINE WITH THE LON-GITUDINAL AXIS OF THE INSULATOR UNDER THE WORST CONDITION OF WIND AND/OR ICE LOAD ANTICIPATED. IT IS <u>NOT</u> THE STILL AIR, NO ICE, LOAD WHICH RESULTS SOLELY FROM THE WEIGHT OF THE TOWER OR MAST AND GUYS PLUS INITIAL GUY TENSION.

MAXIMUM WORKING UPLIFT (APPLICABLE TO SELF SUPPORTING TOWERS ONLY)

NORMALLY A TOWER LEG INSULATOR IS SUBJECTED ONLY TO A DOWNLOAD. IF WIND FORCES ARE ACTING ON THE TOWER THE LOAD DISTRIBUTION ON THE LEGS BECOMES UNEVEN, SHEAR FORCES ARE INTRODUCED AND UNDER EXTREME CONDITIONS THERE MAY BE A GREATLY INCREASED DOWNLOAD ON ONE OR MORE LEGS AND A NEGATIVE LOAD (UPLIFT) ON THE OTHERS. MAXIMUM WORKING UPLIFT IS THE MAXIMUM UPLIFT, IN LINE WITH THE LONGITUDINAL AXIS OF THE INSULATOR, EXPECTED TO BE EXPERIENCED BY ANY INSULATOR UNDER THE WORST CONDITION OF WIND AND ICE LOAD.

MAXIMUM WORKING SHEAR LOAD (TOWERS AND GUYED MASTS)

THIS IS THE MAXIMUM FORCE LIKELY TO BE APPLIED TO THE INSULATOR, NORMAL TO THE LONGITUDINAL AXIS OF THE INSULATOR, UNDER THE WORST CONDITION OF WIND (AND ICE) LOAD.

SAFETY FACTOR (ULTIMATE STRENGTH)

SAFETY FACTOR IS RELATED TO MAXIMUM WORKING LOAD OR ELSE AN ULTIMATE STRENGTH SHOULD BE SPECIFIED. IF A LOAD EXCEEDING THE ULTIMATE STRENGTH OR MAXIMUM WORKING LOAD TIMES SAFETY FACTOR IS APPLIED, MECHANICAL FAILURE MAY OCCUR.

IT WILL GREATLY ASSIST US TO ENSURE WE OFFER THE MOST EFFECTIVE PROPOSAL IF YOU WOULD COMPLETE THE APPROPRIATE SECTION(S) OF THE ENCLOSED DATA SHEETS WHEN STATING YOUR REQUIREMENTS.

THANK YOU.

L.J. DENNETT

SPECIFICATION

NOTE: IF MORE THAN ONE MAST OR TOWER IS USED, AS IN A DIRECTIONAL ARRAY, PLEASE GIVE THE INFORMATION REQUESTED FOR EACH ONE AND INDICATE HOW THE TRANSMITTER POWER IS DIVIDED.

SECTION I: GENERAL (Required in all cases)

TYPE OF RADIATOR: _____ GUYED MAST _____ SELF SUPPORTING TOWER

OPERATING FREQUENCY: _____ KHz.

HEIGHT:

BASE IMPEDANCE _____ RESISTANCE _____REACTANCE

TRANSMITTER POWER:

SECTION II: BASE INSULATOR (Complete this section for a guyed mast)

MAXIMUM WORKING DOWNLOAD:

MAXIMUM WORKING SHEAR LOAD:

SAFETY FACTOR REQUIRED: _____ TIMES MAXIMUM WORKING LOAD

IS SPARK (LIGHTNING) GAP REQUIRED? _____ NO _____YES

SECTION III: BASE INSULATOR (Complete this section for a self supporting tower)

HOW MANY TOWER LEGS?THREEFOUR
MAXIMUM WORKING DOWNLOAD, EACH LEG:
MAXIMUM WORKING UPLIFT, EACH LEG:
MAXIMUM WORKING SHEAR LOAD, EACH LEG:

SAFETY FACTOR REQUIRED: _____ TIMES MAXIMUM WORKING LOAD

IS SPARK (LIGHTNING) GAP REQUIRED? _____ NO _____ YES

SPECIFICATION (Continued)

SECTION IV: GUY STRAIN INSULATORS

NUMBER OF GUY POSITIONS:

NUMBER OF GUYS AT EACH POSITION:

SAFETY FACTOR REQUIRED: _____ TIMES MAXIMUM WORKING LOAD

INSULATORS REQUIRED:

GUY POSITION	NUMBER OF INSULATORS REQUIRED	WORKING LOAD
2		
3		
4		
5		
6		
7		
8		

SECTION V: LIGHTING TRANSFORMER	
SINGLE PHASE PRIMARY SUPPLY VOLTAGE:	VOLTS
FREQUENCY OF SUPPLY VOLTAGE:	Hz.
SECONDARY VOLTAGE REQUIRED:	VOLTS
TOTAL LAMP LOAD:	
IS (SPARK) LIGHTNING GAP REQUIRED?	NO YES

SPECIFICATION (Continued)

SECTION VI: INITIAL SELECTION

IF STANDARD AUSTIN TYPE NUMBERS HAVE BEEN TENTATIVELY SELECTED PLEASE INDICATE BELOW:

- A. BASE INSULATOR:
- B. LIGHTING TRANSFORMER:
- C. GUY STRAINS:

2	
3	
4	
5	
6	
7	
8	

and the second se

COMMENTS:

CUSTOMER NAME

____CONTACT __

For further information contact . . .

PRINTED IN CANADA

AUSTIN INSULATOR DIVISION, DECCA RADAR CANADA (1967) LIMITED

71 Selby Road, Brampton, Ontario. L6W 1K5 Telephone: (416) 457-8720 Telex: 02-2098 Cables: DECRADAR TORONTO

AUSTIN INSULATOR DIVISION

AUSTIN GUY STRAIN INSULATOR TYPE AOA1

Style AOA1-A without rain shield or voltage controls – for light RF duty.

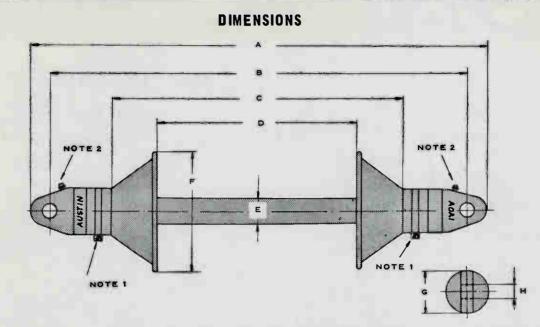
Style AOA1-B with rain shield and voltage control at one end.

Style AOA1-C with rain shield and voltage controls for high RF voltage.

DETAILS OF AUSTIN OIL-FILLED SAFETY CORE GUY STRAIN INSULATORS FOR HIGH MECHANICAL LOADS AND HIGH RF VOLTAGE AVAILABLE ON REQUEST

.

AUSTIN GUY STRAIN INSULATOR - TYPE AOA1



NOTE 1: RAIN SHIELD AND VOLTAGE CONTROLS SUPPLIED UNASSEMBLED TO INSULATOR AND ARE COMPLETE WITH CLAMPING RING FOR SCREWDRIVER ATTACHMENT.

NOTE 2: 1/4" BONDING SCREWS AND WASHERS SUPPLIED.

. .

STYLE	×	8	¢	•	E. State	*	4	**
AOA1-C	21-3/4"	20"	13-3/4"	9-1/2"	1-1/2" dia.	6-1/2" dia.	2-1/2" dia.	13/16" dia.
	55cm	50.8cm	34.9cm	24.1cm	3.8cm dia.	16.5cm dia.	6cm dia.	2cm dia.

Dimension D does not apply to style AOA1-B.

FEATURES

- Steatite insulation white glazed finish.
- End fittings, rain shield and voltage controls – aluminum, iridite finish.
- Recommended maximum working load 4000 pounds.
- Every insulator proof tested 5000 pounds.
- Ultimate strength 9000 pounds.
- R.F. working voltage with rain shield and voltage controls up to 100 Kv.

For further information contact . . .

PRINTED IN CANADA

AUSTIN INSULATOR DIVISION, DECCA RADAR CANADA (1967) LIMITED

AUSTIN INSULATOR DIVISION

Price List

AUSTIN STEATITE GUY STRAIN INSULATORS

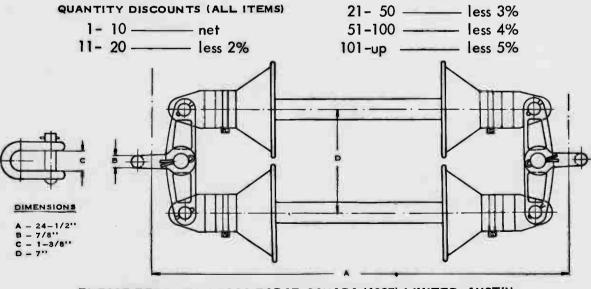
Applications

Light duty mast guying - end and centre insulators for wire antennae, hold down and dead end insulator for feeders.

Optional Features

Available plain, with rain shield, or with rain shield and voltage controls. A kit to permit dual operation for higher mechanical loads is also available.

ITEM	PRICE U.S. FUNDS DUTY PAID F.O.B. TORONTO
Style A0A1–A (plain)	\$20.00
Style A0A1-B (with rain shield)	22.50
Style A0A1–C (with rain shield and voltage controls	25.00
Rain shield with clamp	3.00
Voltage control with clamp	3.00
Adapter kit (as illustrated – less insulators – all hardware shown is supplied)	20.00



PLEASE REFER TO DECCA RADAR CANADA (1967) LIMITED, AUSTIN INSULATOR DIVISION, STANDARD CONDITIONS OF SALE OVERLEAF.

DECCA RADAR CANADA (1967) LIMITED

2.00

hereinafter referred to as the "Company"

CONDITIONS OF SALE

(U.S.A.)

L. PRICE

All prices quoted are net U.S. funds, U.S. duty paid, F.O.B. Teremte, Canada. Payment is to be made to the Company at Toronto.

2. PAYMENT

Terms act thirty days to established accounts.

3. DUTY AND TAXES

Customs clearance is handled and duty is paid by the Company when the goods enter the U.S.A. and the customer has no additional duty or brokerage charges to pay. Prices quoted do not include any applicable U.S. Federal or State taxes.

4. DELIVERY

The Company will use its best efforts to make delivery in the time specified but shall not be held responsible for any loss or other consequence as a result of delay in delivery of the equipment. If the Company is unable to deliver the whole or any part of the order due to reasons outside the Company's control, the Company has the right to cancel or suspend the whole or part order.

5. GUARANTEE

The Company's components are guaranteed to be of sound material and good workmanship. Under such guarantee the Company will at its option either repair or replace without charge any standard part of the said component which becomes defective in proper use and fair wear and tear within a period of 12 months from date of shipment of the component provided the Company is promptly notified in writing of such defect occurring and the defective part is returned carriage paid to Decca Radar Canada (1967) Limited, Toronto, Canada.

Notwithstanding the guarantee terms as herein stated the Company shall have no liability under any warranty or condition implied by law or for any consequential loss or damage occurring to any structure or building on which the said component is permanently or temporarily located nor to any person or persons acting in connection with such components.

6. ORDERS

Should be made out to Austin Insulator Division, Decea Radar Canada (1967) Limited.

7. COVERNMENT PERMITS

Any equipment is offered subject to the granting of import and/or Export permits - by any Government concerned.

8. INJURY, LOSS OR DAMAGE

The customer shall indemnify the Company against all claims whether made under any contract or statute or under Common Law in respect of any loss or damage to any property whatsoever or injury to any person whatsoever arising out of any defect in material or workmanship in connection with any goods manufactured and/or sold by the Company, or any default or negligence on the part of the Company's servants in connection with or during the carrying out of any work by the Company on customer's or other person's property.

9. ACCEPTANCE OF QUOTATION

Acceptance of the Company's written quotation shall be taken as acceptance also of these terms and conditions of sale subject to any variation thereto agreed by the Company in writing.

10. SPECIFICATIONS

All prices quoted are for the supply of components or materials in accordance with the Company's Specification current at time of despatch except where otherwise stated in writing.

AUSTIN INSULATOR DIVISION, DECCA RADAR CANADA (1967) LIMITED

P

AUSTIN INSULATOR DIVISION

Price List (U.S.A.) AUSTIN GUY STRAIN INSULATORS radio Antenna masts and towers

PRELOADED

TYPE	RECOMMENDED MAXIMUM WORKING LOAD	PRICE (U.S. FUNDS) DUTY PAID F.O.B, TORONTO
A-1880	6,000 lb.	\$110.00
A-1880-F	6,000 lb.	120.00
A-4502	12,000 lb.	190.00
A-4502-F	12,000 lb.	190.00
A-3056	18,000 lb.	300.00
A-4333	27,000 lb.	450.00

SPRING LOADED

TYPE	RECOMMENDED MAXIMUM WORKING LOAD	PRICE (U.S. FUNDS) DUTY PAID F.O.B. TORONTO
A-3400	9,000 lb.	\$ 380.00
A-4117	15,000 lb.	475.00
A-3949-5	23,000 lb.	595.00
A-4066	40,000 lb.	795.00
A-3511	60,000 lb.	1,150.00

PLEASE REFER TO DECCA RADAR CANADA (1967) LIMITED, AUSTIN INSULATOR DIVISION, HEREINAFTER REFERRED TO AS THE "COMPANY", STANDARD CONDITIONS OF SALE OVERLEAF.

DECCA RADAR CANADA (1967) LIMITED

hereinafter referred to as the "Company"

I. PRICE

CONDITIONS OF SALE (U.S.A.)

All prices quoted are not U.S. funds, U.S. duty paid, F.O.B. Toronto, Canada. Payment is to be made to the Company at Toronto.

2. PAYMENT

Terms net thirty days to established accounts.

3. DUTY AND TAXES

Customs clearance is handled and duty is paid by the Company when the goods enter the U.S.A. and the customer has no additional duty or brokerage charges to pay. Prices quoted do not include any applicable U.S. Federal or State taxes.

4. DELIVERY

The Company will use its best efforts to make delivery in the time specified but shall not be held responsible for any loss or other consequence as a result of delay in delivery of the equipment. If the Company is unable to deliver the whole or any part of the order due to reasons outside the Company's control, the Company has the right to cancel or suspend the whole or part order.

5. QUARANTEE

The Company's components are guaranteed to be of sound material and good workmanship. Under such guarantee the Company will at its option either repair or replace without charge any standard part of the said component which becomes defective in proper use and fair wear and tear within a period of 12 months from date of shipment of the component provided the Company is promptly notified in writing of such defect occurring and the defective part is returned carriage paid to Decca Radar Canada (1967) Limited, Toronto, Canada.

Notwithstanding the guarantee terms as herein stated the Company shall have no liability under any warranty or condition implied by law or for any consequential loss or damage occurring to any structure or building on which the said component is permanently or temporarily located nor to any person or persons acting in connection with such components.

6. ORDERS

Should be made out to Austin Insulator Division, Decca Radar Canada (1967) Limited.

7. GOVERNMENT PERMITS

Any equipment is offered subject to the granting of import and/or Export permits - by any Government concerned.

8. INJURY, LOSS OR DAMAGE

The customer shall indemnify the Company against all claims whether made under any contract or statute or under Common Law in respect of any loss or damage to any property whatsoever or injury to any person whatsoever arising out of any defect in material or workmanship in connection with any goods manufactured and/or sold by the Company, or any default or negligence on the part of the Company's servants in connection with or during the carrying out of any work by the Company on customer's or other person's property.

9. ACCEPTANCE OF QUOTATION

Acceptance of the Company's written quotation shall be taken as acceptance also of these terms and conditions of sale subject to any variation thereto agreed by the Company in writing.

10. SPECIFICATIONS

All prices quoted are for the supply of components or materials in accordance with the Company's Specification current at time of despatch except where otherwise stated in writing.

AUSTIN INSULATOR DIVISION, DECCA RADAR CANADA (1967) LIMITED

AUSTIN INSULATOR DIVISION

AUSTIN GUY INSULATOR



Oli Filled Preloaded Safety Core Type A-1880 (6,000 lb. working)

(FULL SPECIFICATION OVERLEAF)

- LONG LEAKAGE PATH PROVIDING HIGH INSULATION VALUES AND HIGH SAFE WORKING VOLTAGE.
- LOW CAPACITY GIVING MINIMUM CHARGING CURRENT, MINIMUM EFFECT ON TUNING AND ENSURING THAT THIS INSULATOR HANDLES THE HIGHEST POSSIBLE PROPORTION OF THE WORKING VOLTAGE ON THE GUY-THUS RELIEVING THE STRAIN ON LOWER GUY BREAKUP INSULATORS.
- CLEAN SMOOTH INSULATOR SURFACE MINIMIZING LEAKAGE DUE TO DIRT CONTAMINATION.
- OIL FILLING PROVIDES HIGH DIELECTRIC STRENGTH AND STATIC DRAIN WITHIN THE INSULATOR.

PRELOADING

The descriptive term "preloading" refers to a type of construction in which the safety link within the insulator body is, at the time of manufacture, pre-stressed to the particular tension referred to in the table. This has the effect of loading the outer porcelain sleeve in compression between the two insulator end fittings. This loading seals both ends of the insulator against oil leakage. It will be noted that the recommended maximum working load is a factor of three-quarters of the preload which ensures that the oil seal will not be broken in normal usage. The preloading figure has nothing to do with the ultimate strength of the insulator which is determined by mechanical failure when it is stressed beyond its limit. If the guy tension exceeds the preload figure at any time, an oil leak may occur and must be given attention but mechanical failure will not occur until the ultimate load for the insulator is exceeded.

AUSTIN GUY INSULATOR TYPE A-1880

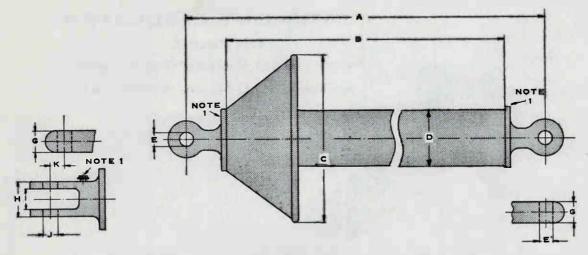
· ·

· ...

A-1880 INSULATOR HAS EYE TYPE FITTINGS AT BOTH ENDS.

A-1880-F HAS CLEVIS FITTING AT TOP END.

(BALL AND SOCKET TYPE END FITTINGS AVAILABLE ON REQUEST.)





DIMENSIONS

A	8	c	D	E	G	н	I	J	K
27-5/8" 70cm	24" 61cm	10 ¤ 25cm	2-3/4" 7cm	3/4" 2cm		1-1/2" 3.8cm	<i>(</i>	1-1/16" 2.7cm	1-3/8" 3.5cm

SPECIFICATIONS

ARCING VOLTAGE	MAXIMUM RECOMMENDED WORKING LOAD	ULTIMATE STRENGTH	PRELOAD	WEIGHT
280	6,000 lbs.	16,000 lbs.	8,000 lbs.	16 lbs.
	2,720 kg	7,260 kg	3,630 kg	7 kg

For further information contact

PRINTED IN CANADA

AUSTIN INSULATOR DIVISION, DECCA RADAR CANADA (1967) LIMITED

AUSTIN INSULATOR DIVISION

AUSTIN GUY INSULATOR Oil Filled



Oil Filled Preloaded Safety Core Type A-4502 (12,000 lb. working)

(FULL SPECIFICATION OVERLEAF)

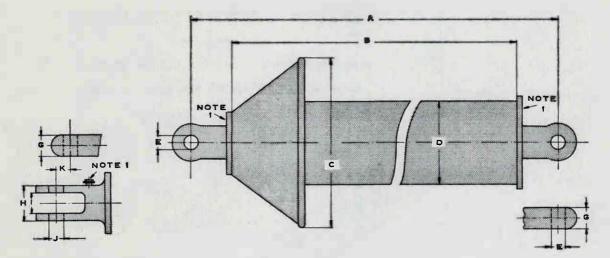
- LONG LEAKAGE PATH PROVIDING HIGH INSULATION VALUES AND HIGH SAFE WORKING VOLTAGE.
- LOW CAPACITY GIVING MINIMUM CHARGING CURRENT, MINIMUM EFFECT ON TUNING AND ENSURING THAT THIS INSULATOR HANDLES THE HIGHEST POSSIBLE PROPORTION OF THE WORKING VOLTAGE ON THE GUY-THUS RELIEVING THE STRAIN ON LOWER GUY BREAKUP INSULATORS.
- CLEAN SMOOTH INSULATOR SURFACE MINIMIZING LEAKAGE DUE TO DIRT CONTAMINATION.
- OIL FILLING PROVIDES HIGH DIELECTRIC STRENGTH AND STATIC DRAIN WITHIN THE INSULATOR.

PRELOADING

The descriptive term "preloading" refers to a type of construction in which the safety link within the insulator body is, at the time of manufacture, pre-stressed to the particular tension referred to in the table. This has the effect of loading the outer porcelain sleeve in compression between the two insulator end fittings. This loading seals both ends of the insulator against oil leakage. It will be noted that the recommended maximum working load is a factor of three-quarters of the preload which ensures that the oil seal will not be broken in normal usage. The preloading figure has nothing to do with the ultimate strength of the insulator which is determined by mechanical failure when it is stressed beyond its limit. If the guy tension exceeds the preload figure at any time, an oil leak may occur and must be given attention but mechanical failure will not occur until the ultimate load for the insulator is exceeded.

AUSTIN GUY INSULATOR TYPE A-4502

A-4502 INSULATOR HAS EYE TYPE FITTINGS AT BOTH ENDS. A-4502-F HAS CLEVIS FITTING AT TOP END.



HOTE 1: SCREWS PROVIDED FOR BONDING TO MAST AND GUY WRE.

DIMENSIONS

A	8	C	D	E	G	N	J	K
48-1/4" 123cm	41-1/4" 105cm						1-1/4" 3.2cm	

SPECIFICATIONS

ARCING VOLTAGE	MAXIMUM RECOMMENDED WORKING LOAD	ULTIMATE STRENGTH	PRELOAD	WEIGHT
500	12,000 lbs.	32,000 lbs.	16,000 lbs.	47 lbs.
	5,440 kg	14,520 kg	7,260 kg	21 kg

For further information contact

PRINTED IN CANADA

AUSTIN INSULATOR DIVISION, DECCA RADAR CANADA (1967) LIMITED

23 Six Point Road. Toronto 18, Ontario. Telephone: (416) 239-1161 Telex: 02-2098 Cables: Decradar Toronto

* ...*

AUSTIN INSULATOR DIVISION

AUSTIN GUY INSULATOR Oil Filled Preloaded Safety Core Type A-3056 (18,000 lb. working)

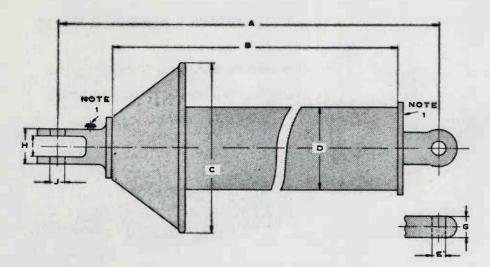
(FULL SPECIFICATION OVERLEAF)

- LONG LEAKAGE PATH PROVIDING HIGH INSULATION VALUES AND HIGH SAFE WORKING VOLTAGE.
- LOW CAPACITY GIVING MINIMUM CHARGING CURRENT, MINIMUM EFFECT ON TUNING AND ENSURING THAT THIS INSULATOR HANDLES THE HIGHEST POSSIBLE PROPORTION OF THE WORKING VOLTAGE ON THE GUY-THUS RELIEVING THE STRAIN ON LOWER GUY BREAKUP INSULATORS.
- CLEAN SMOOTH INSULATOR SURFACE MINIMIZING LEAKAGE DUE TO DIRT CONTAMINATION.
- OIL FILLING PROVIDES HIGH DIELECTRIC STRENGTH AND STATIC DRAIN WITHIN THE INSULATOR.

PRELOADING

The descriptive term "preloading" refers to a type of construction in which the safety link within the insulator body is, at the time of manufacture, pre-stressed to the particular tension referred to in the table. This has the effect of loading the outer porcelain sleeve in compression between the two insulator end fittings. This loading seals both ends of the insulator against oil leakage. It will be noted that the recommended maximum working load is a factor of three-quarters of the preload which ensures that the oil seal will not be broken in normal usage. The preloading figure has nothing to do with the ultimate strength of the insulator which is determined by mechanical failure when it is stressed beyond its limit. If the guy tension exceeds the preload figure at any time, an oil leak may occur and must be given attention but mechanical failure will not occur until the ultimate load for the insulator is exceeded.

 $e_{\mathbf{r}}$



HOTE 1: SCREWS PROVIDED FOR BONDING TO MAST AND GUY THRE.

DIMENSIONS

A	B	C	D	ĸ	G	н	F	J.
38-3/8" 98cm	30" 76cm	12" 30.5cm			1-1/8" 2.9cm			1-3/16" 3.0cm

SPECIFICATIONS

ARCING VOLTAGE	MAXIMUM RECOMMENDED WORKING LOAD	ULTIMATE STRENGTH	PRELOAD	WEIGHT
350	18,000 lb.	48,000 lb.	24,000 lb.	60 lb.
	8,200 kg	21,800 kg	10,900 kg	27 kg

For further information contact

PRINTED IN CANADA

AUSTIN INSULATOR DIVISION, DECCA RADAR CANADA (1967) LIMITED

AUSTIN INSULATOR DIVISION

AUSTIN GUY INSULATOR Oil Filled Preloaded Safety Core Type A-4333 (27,000 lb. working)

(FULL SPECIFICATION OVERLEAF)

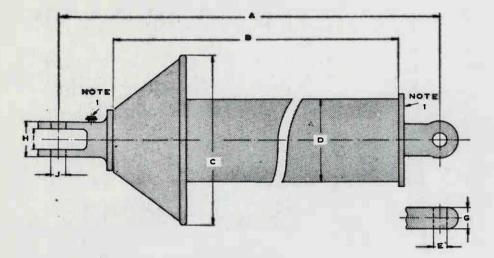
- LONG LEAKAGE PATH PROVIDING HIGH INSULATION VALUES AND HIGH SAFE WORKING VOLTAGE.
- LOW CAPACITY GIVING MINIMUM CHARGING CURRENT, MINIMUM EFFECT ON TUNING AND ENSURING THAT THIS INSULATOR HANDLES THE HIGHEST POSSIBLE PROPORTION OF THE WORKING VOLTAGE ON THE GUY-THUS RELIEVING THE STRAIN ON LOWER GUY BREAKUP INSULATORS.
- CLEAN SMOOTH INSULATOR SURFACE MINIMIZING LEAKAGE DUE TO DIRT CONTAMINATION.
- OIL FILLING PROVIDES HIGH DIELECTRIC STRENGTH AND STATIC DRAIN WITHIN THE INSULATOR.

PRELOADING

The descriptive term "preloading" refers to a type of construction in which the safety link within the insulator body is, at the time of manufacture, pre-stressed to the particular tension referred to in the table. This has the effect of loading the outer porcelain sleeve in compression between the two insulator end fittings. This loading seals both ends of the insulator against oil leakage. It will be noted that the recommended maximum working load is a factor of three-quarters of the preload which ensures that the oil seal will not be broken in normal usage. The preloading figure has nothing to do with the ultimate strength of the insulator which is determined by mechanical failure when it is stressed beyond its limit. If the guy tension exceeds the preload figure at any time, an oil leak may occur and must be given attention but mechanical failure will not occur until the ultimate load for the insulator is exceeded.

AUSTIN GUY INSULATOR TYPE A-4333

•



NOTE I: SCREWS PROVIDED FOR BONDING TO MAST AND SUY WRE.

DIMENSIONS

•	c	D	HE.	G	н	1	J.
52-1/2" 133cm	12" 30.5cm	6" 15.2cm	NOT	-		1-3/4" 4.5cm	1-5/8" 4.1cm

NOTE 2: TYPE A-4988 HAS CLEVIS BOTH ENDS - PLEASE REFER TO DIMENSIONS H, I, J INSTEAD OF E, C.

SPECIFICATIONS

ARCING VOLTAGE	MAXIMUM RECOMMENDED WORKING LOAD	ULTIMATE STRENGTH	PRELOAD	WEIGHT
500	27,000 lb. 12,200 kg	72,000 lb. 32,700 kg	36,000 lb. 16,300 kg	107 lb. 49 kg
	12,200 kg	32,700 kg	10,300 kg	47 Kg

For further information contact

PRINTED IN CANADA

AUSTIN INSULATOR DIVISION, DECCA RADAR CANADA (1967) LIMITED

AUSTIN INSULATOR DIVISION

AUSTIN GUY INSULATOR Oil Filled

Spring Loaded Safety Core Type A-3400 (34,000 lb. ultimate)

(FULL SPECIFICATION OVERLEAF)

- LONG LEAKAGE PATH PROVIDING HIGH INSULATION VALUES AND HIGH SAFE WORKING VOLTAGE.
- LOW CAPACITY GIVING MINIMUM CHARGING CURRENT, MINIMUM EFFECT ON TUNING AND ENSURING THAT THIS INSULATOR HANDLES THE HIGHEST POSSIBLE PROPORTION OF THE WORKING VOLTAGE ON THE GUY-THUS RELIEVING THE STRAIN ON LOWER GUY BREAKUP INSULATORS.
- CLEAN SMOOTH INSULATOR SURFACE MINIMIZING LEAKAGE DUE TO DIRT CONTAMINATION.
- OIL FILLING PROVIDES HIGH DIELECTRIC STRENGTH AND STATIC DRAIN WITHIN THE INSULATOR.

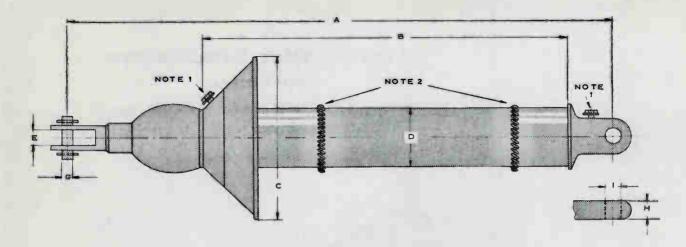
SPRING LOADING

The descriptive term "spring loaded" refers to a type of construction in which the safety link within the insulator body is, at the time of manufacture, pre-stressed to a small initial tension. This tension is maintained when the insulator is in service by a compression spring located in the insulator head cap. This type of construction ensures that the pre-loading is not affected in any way by the guy load placed on the insulator; hence the insulator can be worked up to its ultimate without any danger of oil leak occurring. The purpose of the pre-loading is to maintain an oil tight seal at the top and bottom ends of the porcelain tube. The initial loading varies with the size of the insulator and is in the range of 3,000 to 10,000 lbs.

AUSTIN GUY INSULATOR TYPE A-3400

€.

-



NOTE 1: SCREWS FOR ATTACHING BONDING WIRES TO MAST AND GUYS.

NOTE 2: EXTERNAL VOLTAGE CONTROLS CAN BE FITTED ON REQUEST IF R.F. OPERATING CONDITIONS ARE SEVERE.

DIMENSIONS

A	В	с	D	E	G	н	1
55-1/2"	38-3/4"	18"	4-1/2"	1-7/16"	1-1/8"	1-1/8"	1-1/4"
141cm	98cm	46cm	11.4cm	3.64cm	2.86cm	2.86cm	3.17cm

SPECIFICATIONS

ARCING VOLTAGE	RECOMMENDED WORKING LOAD	ULTIMATE LOAD	WEIGHT
450	9,000 lbs.	34,000 lbs.	86 lbs.
	4,080 kg	15,400 kg	39 kg

For further information contact . . .

PRINTED IN CANADA

AUSTIN INSULATOR DIVISION, DECCA RADAR CANADA (1967) LIMITED

AUSTIN INSULATOR DIVISION

AUSTIN GUY INSULATOR

Oil Filled

Spring Loaded Safety Core Type A - 4117 (52,000 lb. ultimate)

(FULL SPECIFICATION OVERLEAF)

 LONG LEAKAGE PATH PROVIDING HIGH INSULATION VALUES AND HIGH SAFE WORKING VOLTAGE.

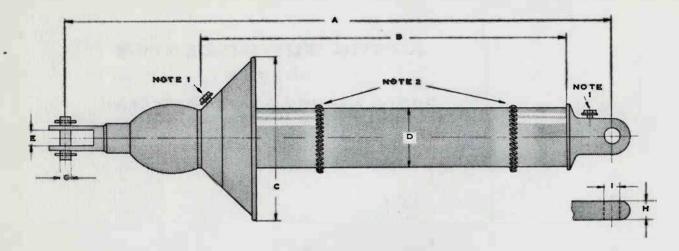
- LOW CAPACITY GIVING MINIMUM CHARGING CURRENT, MINIMUM EFFECT ON TUNING AND ENSURING THAT THIS INSULATOR HANDLES THE HIGHEST POSSIBLE PROPORTION OF THE WORKING VOLTAGE ON THE GUY-THUS RELIEVING THE STRAIN ON LOWER GUY BREAKUP INSULATORS.
- CLEAN SMOOTH INSULATOR SURFACE MINIMIZING LEAKAGE DUE TO DIRT CONTAMINATION.
- OIL FILLING PROVIDES HIGH DIELECTRIC STRENGTH AND STATIC DRAIN WITHIN THE INSULATOR.

SPRING LOADING

The descriptive term "spring loaded" refers to a type of construction in which the safety link within the insulator body is, at the time of manufacture, pre-stressed to a small initial tension. This tension is maintained when the insulator is in service by a compression spring located in the insulator head cap. This type of construction ensures that the pre-loading is not affected in any way by the guy load placed on the insulator; hence the insulator can be worked up to its ultimate without any danger of oil leak occurring. The purpose of the pre-loading is to maintain an oil tight seal at the top and bottom ends of the porcelain tube. The initial loading varies with the size of the insulator and is in the range of 3,000 to 10,000 lbs.

AUSTIN GUY INSULATOR TYPE A-4117

€.



NOTE 1: SCREWS FOR ATTACHING BONDING WIRES TO MAST AND GUYS.

NOTE 2: EXTERNAL VOLTAGE CONTROLS CAN BE FITTED ON REQUEST IF R.F. OPERATING CONDITIONS ARE SEVERE.

DIMENSIONS

A	в	с	D	E	G	н	1
56"	39-1/2"	18"	5-5/8"	1-3/8"	1-1/2"	1-1/4"	1-1/2"
142cm	100cm	45cm	14.3cm	3.5cm	3.8cm	3.2cm	3.8cm

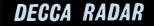
SPECIFICATIONS

ARCING VOLTAGE	RECOMMENDED WORKING LOAD	ULTIMATE LOAD	WEIGHT	
450	15,000 lbs.	52,000 lbs.	127 lbs.	
	6,800 kg	23,600 kg	58 kg	

For further information contact

PRINTED IN CANADA

AUSTIN INSULATOR DIVISION, DECCA RADAR CANADA (1967) LIMITED



.7

AUSTIN INSULATOR DIVISION

AUSTIN GUY INSULATOR Oil Filled

Spring Loaded Safety Core Type A-3949-S (83,000 lb. uitimate)

(FULL SPECIFICATION OVERLEAF)

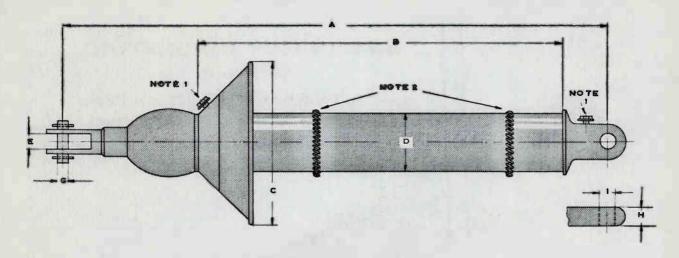
- LONG LEAKAGE PATH PROVIDING HIGH INSULATION VALUES AND HIGH SAFE WORKING VOLTAGE.
- LOW CAPACITY GIVING MINIMUM CHARGING CURRENT, MINIMUM EFFECT ON TUNING AND ENSURING THAT THIS INSULATOR HANDLES THE HIGHEST POSSIBLE PROPORTION OF THE WORKING VOLTAGE ON THE GUY-THUS RELIEVING THE STRAIN ON LOWER GUY BREAKUP INSULATORS.
- CLEAN SMOOTH INSULATOR SURFACE MINIMIZING LEAKAGE DUE TO DIRT CONTAMINATION.
- OIL FILLING PROVIDES HIGH DIELECTRIC STRENGTH AND STATIC DRAIN WITHIN THE INSULATOR.

SPRING LOADING

The descriptive term "spring loaded" refers to a type of construction in which the safety link within the insulator body is, at the time of manufacture, pre-stressed to a small initial tension. This tension is maintained when the insulator is in service by a compression spring located in the insulator head cap. This type of construction ensures that the pre-loading is not affected in any way by the guy load placed on the insulator; hence the insulator can be worked up to its ultimate without any danger of oil leak occurring. The purpose of the pre-loading is to maintain an oil tight seal at the top and bottom ends of the porcelain tube. The initial loading varies with the size of the insulator and is in the range of 3,000 to 10,000 lbs.

AUSTIN GUY INSULATOR TYPE A-3949-S

€.,



NOTE 1: SCREWS FOR ATTACHING BONDING WIRES TO MAST AND GUYS. NOTE 2: EXTERNAL VOLTAGE CONTROLS CAN BE FITTED ON REQUEST IF R.F. OPERATING CONDITIONS ARE SEVERE.

DIMENSIONS

A	9	G	D	E	G	н	1
61-1/2"	42"	19"	7"	1-3/4 "	1-3/4"	1-9/16"	1-3/4"
156cm	107cm	48cm	18cm	4.5cm	4.5cm	3.8cm	4.5cm

SPECIFICATIONS

ARCING VOLTAGE	RECOMMENDED WORKING LOAD	ULTIMATE LOAD	WEIGHT
460	23,000 lb.	83,000 lb.	218 lb.
	10,400 kg	37,700 kg	99 kg

For further information contact

PRINTED IN CANADA

AUSTIN INSULATOR DIVISION, DECCA RADAR CANADA (1967) LIMITED

AUSTIN INSULATOR DIVISION

AUSTIN GUY INSULATOR

Oil Filled

Spring Loaded Safety Core Type TYPE A-4066 (145,000 lb. ultimate)

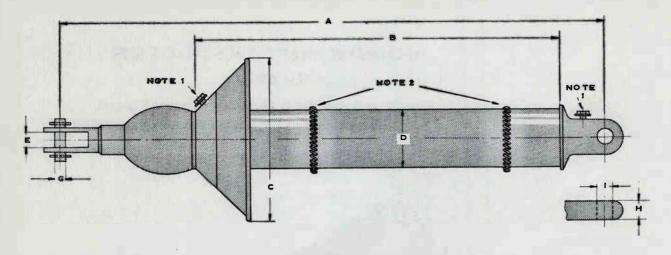
(FULL SPECIFICATION OVERLEAF)

- LONG LEAKAGE PATH PROVIDING HIGH INSULATION VALUES AND HIGH SAFE WORKING VOLTAGE.
- LOW CAPACITY GIVING MINIMUM CHARGING CURRENT, MINIMUM EFFECT ON TUNING AND ENSURING THAT THIS INSULATOR HANDLES THE HIGHEST POSSIBLE PROPORTION OF THE WORKING VOLTAGE ON THE GUY-THUS RELIEVING THE STRAIN ON LOWER GUY BREAKUP INSULATORS.
- CLEAN SMOOTH INSULATOR SURFACE MINIMIZING LEAKAGE DUE TO DIRT CONTAMINATION.
- OIL FILLING PROVIDES HIGH DIELECTRIC STRENGTH AND STATIC DRAIN WITHIN THE INSULATOR.

SPRING LOADING

The descriptive term "spring loaded" refers to a type of construction in which the safety link within the insulator body is, at the time of manufacture, pre-stressed to a small initial tension. This tension is maintained when the insulator is in service by a compression spring located in the insulator head cap. This type of construction ensures that the pre-loading is not affected in any way by the guy load placed on the insulator; hence the insulator can be worked up to its ultimate without any danger of oil leak occurring. The purpose of the pre-loading is to maintain an oil tight seal at the top and bottom ends of the porcelain tube. The initial loading varies with the size of the insulator and is in the range of 3,000 to 10,000 lbs.

AUSTIN GUY INSULATOR TYPE A-4066



NOTE 1: SCREWS FOR ATTACHING BONDING WIRES TO MAST AND GUYS. NOTE 2: EXTERNAL VOLTAGE CONTROLS CAN BE FITTED ON REQUEST IF R.F. OPERATING CONDITIONS ARE SEVERE.

DIMENSIONS

A	в	c	D	E	G	н	1
64"	42"	19"	8-1/4"	2-1/8"	2-1/8"	1-7/8"	2-3/8"
163cm	107cm	48cm	21cm	5.4cm	5.4cm	4.8cm	6.0cm

SPECIFICATIONS

ARCING VOLTAGE	RECOMMENDED	ULTIMATE	WEIGHT	
KV PEAK DRY	WORKING LOAD	LOAD		
460	40,000 lb.	145,000 lb.	285 lb.	
	18,200 kg	65,800 kg	129 kg	

For further information contact

PRINTED IN CANADA

AUSTIN INSULATOR DIVISION, DECCA RADAR CANADA (1967) LIMITED

1 *

AUSTIN INSULATOR DIVISION

AUSTIN GUY INSULATOR Oil Filled

Spring Loaded Safety Core Type TYPE A-3511 (200,000 lb. ultimate)

(FULL SPECIFICATION OVERLEAF)

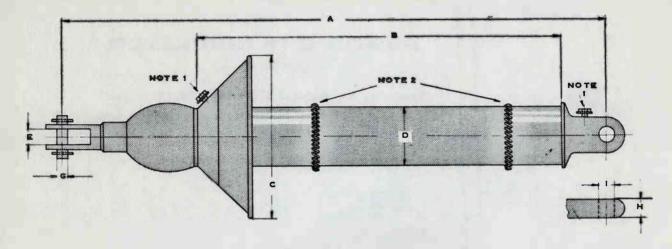
- LONG LEAKAGE PATH PROVIDING HIGH INSULATION VALUES AND HIGH SAFE WORKING VOLTAGE.
- LOW CAPACITY GIVING MINIMUM CHARGING CURRENT, MINIMUM EFFECT ON TUNING AND ENSURING THAT THIS INSULATOR HANDLES THE HIGHEST POSSIBLE PROPORTION OF THE WORKING VOLTAGE ON THE GUY-THUS RELIEVING THE STRAIN ON LOWER GUY BREAKUP INSULATORS.
- CLEAN SMOOTH INSULATOR SURFACE MINIMIZING LEAKAGE DUE TO DIRT CONTAMINATION.
- OIL FILLING PROVIDES HIGH DIELECTRIC STRENGTH AND STATIC DRAIN WITHIN THE INSULATOR.

SPRING LOADING

The descriptive term "spring loaded" refers to a type of construction in which the safety link within the insulator body is, at the time of manufacture, pre-stressed to a small initial tension. This tension is maintained when the insulator is in service by a compression spring located in the insulator head cap. This type of construction ensures that the pre-loading is not affected in any way by the guy load placed on the insulator; hence the insulator can be worked up to its ultimate without any danger of oil leak occurring. The purpose of the pre-loading is to maintain an oil tight seal at the top and bottom ends of the porcelain tube. The initial loading varies with the size of the insulator and is in the range of 3,000 to 10,000 lbs.

AUSTIN GUY INSULATOR TYPE A-3511

1. . .



NOTE 1: SCREWS FOR ATTACHING BONDING WIRES TO MAST AND GUYS.

NOTE 2: EXTERNAL VOLTAGE CONTROLS CAN BE FITTED ON REQUEST IF R.F. OPERATING CONDITIONS ARE SEVERE.

DIMENSIONS

A	B	С	D	E	G	н	1
63-1/2"	41-1/8"	19"	9-1/8"	2-1/2"	2-1/4"	2"	2-1/2"
161cm	104cm	48cm	23cm	6.4cm	5.7cm	5cm	6.4cm

SPECIFICATIONS

ARCING VOLTAGE	RECOMMENDED WORKING LOAD	ULTIMATE LOAD	WEIGHT
500	60,000 lb.	200,000 lb.	350 lb.
	27,200 kg	90,700 kg	159 kg

For further information contact

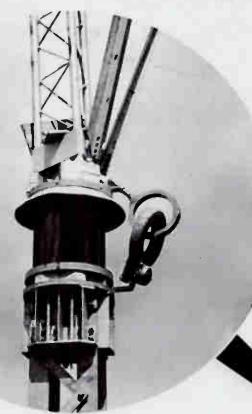
PRINTED IN CANADA

AUSTIN INSULATOR DIVISION, DECCA RADAR CANADA (1967) LIMITED

AUSTIN INSULATOR DIVISION

AUSTIN RING TYPE ISOLATION TRANSFORMERS for RADIO TOWER AND MAST LIGHTING

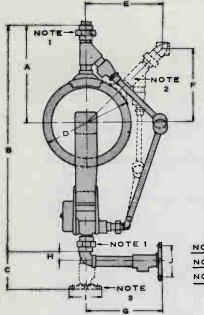
(AIR INSULATION)



A TYPICAL AUSTIN LIGHTING TRANSFORMER, THE PROVEN WAY TO SUPPLY LIGHTING POWER TO A RADIATOR (thousands in use throughout the world)

- AIR INSULATION Minimum R.F. loss
- LOW CAPACITANCE Minimum and stable effect on tuning.
- **REGULATION** Better than 10% under normal load conditions.
- FLASHING LIGHTS Reactor can be supplied to maintain voltage regulation.
- EFFICIENCY Better than 90% under normal load conditions.
- SHIELDING Primary and secondary electrostatically shielded.
- MOUNTING Several standard arrangements.
- LIGHTNING GAP Optional

SPECIFICATIONS FOR STANDARD TYPES SHOWN OVERLEAF. OTHER VOLTAGES AND POWER RATINGS AVAILABLE ON REQUEST.



AUSTIN LIGHTING TRANSFORMERS

DIMENSIONS

RATING			\$	ø	E	#		*	t	*	PIPE FITTINES
700 & 1500 watt	15" 38cm	34 " 86cm	4" 10cm	12.5" 32cm	11.6" 29cm	11.6" 29cm	5.8" 15cm	1.8" 5cm	4.25" 11cm	3.125" 8cm	1 " (PS
3000 watt	19" 48cm	44" 112cm	5" 13cm	16.0" 41cm	13.5" 34cm	13.5" 34cm	14.0" 36cm	1.8" 5cm	6.0" 15cm	4.75" 12cm	1.5"IPS

NOTE 1: STANDARD PIPE FITTINGS ARE USED FOR SUPPORTS.

NOTE 2: SECONDARY SHOWN (DOTTED) INCLINED AT 45°.

NOTE 3: FOUR HOLES 5/8" (700W AND 1500W) OR 11/16" (8000W) DRILLED THROUGH BASE FOR MOUNTING.

SPECIFICATIONS

TRANSFORMER	CAPACITY	SECONDARY	SECONDARY TAP	MOUNTING	ATTACHMENTS		KIGHT
NUMBER	KVA	VOLTAGE	(OVER VOLTAGE) j	FTYLE	EXTRA	POUNDE	KILOGRAM
A-1761	0.7	115	None	Pedestal	None	70	32
A-2701	0.7	115	None	Pedestal	Lightning Gap	75	34
A-1761-S	0.7	115	None	Side Bracket	None	70	32
A-2701-S	0.7	115	Nane	Side Bracket	Lightning Gap	75	34
A-2100	1.5	115	Nane	Side Bracket	None	81	37
A-2101	1.5	115	None	Side Bracket	Lightning Gap	96	44
A-2102	1.5	115	None	Pedestal	None	82	37
A-2103	1.5	115	None	Pedestal	Lightning Gap	96	44
A-1970	3.0	115	+10%	Side Bracket	None	188	85
A-1971	3.0	115	+10%	Side Bracket	Lightning Gap	201	91
A-1972	3.0	115	+10%	Pedestal	None	182	83
A-1973	3.0	115	+10%	Pedestol	Lightning Gap	200	91
A-1974	3.0	115	+10%	Side Bracket	None	189	84
A-1975	3.0	115	+10%	Side Bracket	Lightning Gap	201	91
A-1976	3.0	115	+10%	Pedestal	None	189	84
A-1977	3.0	115	+10%	Pedestal	Lightning Gap	201	91
Transformers wi	th higher ratings	as shawn below or	special arder:				
A-2808	5.0	115/230	None	Pedestal	Lightning Gap	365	166
A-2876	5.0	115/230	Nane	Pedestal	None	378	171
A-2877	5.0	115/230	Nane	Pedestal	Lightning Gap	384	174
A-2814	7.0	115/230	Nane	Side Bracket	Lightning Gap	340	154
A-2815	7.0	115/230	Nane	Side Bracket	None	340	154

For further information contact

PRINTED IN CANADA

AUSTIN INSULATOR DIVISION, DECCA RADAR CANADA (1967) LIMITED

AUSTIN INSULATOR DIVISION

Price List

AUSTIN RING TYPE ISOLATION TRANSFORMERS for RADIO TOWER AND MAST LIGHTING

(AIR INSULATION)

TRANSFORMER NO.	CAPACITY K.V.A.	PRICE (U.S. FUNDS) DUTY PAID F.O.B. TORONTO
A-1761	0.7	\$300.00
A-2701	0.7	325.00
A-1761-S	0.7	300.00
A-2701-S	0.7	325.00
A-2100	1.5	350.00
A-2101	1.5	375.00
A-2102	1.5	350.00
A-2103	1.5	375.00
A-1970	3.0	375.00
A-1971	3.0	400.00
A-1972	3.0	375.00
A-1973	3.0	400.00
A-1974	3.0	375.00
A-1975	3.0	400.00
A-1976	3.0	375.00
A-1977	3.0	400.00
A-2808	5.0	700.00
A-2876	5.0	675.00
A-2877	5.0	700.00
A-2814	7.0	800.00
A-2815	7.0	775.00

PLEASE REFER TO DECCA RADAR CANADA (1967) LIMITED, AUSTIN INSULATOR DIVISION, STANDARD CONDITIONS OF SALE OVERLEAF.

DECCA RADAR CANADA (1967) LIMITED

hereinafter referred to as the "Company"

CONDITIONS OF SALE (U.S.A.)

I. PRICE

All prices quoted are net U.S. funds, U.S. duty paid, F.O.B. Toronto, Caunda. Payment is to be made to the Company at Toronto.

2. PAYMENT

Terms net thirty days to established accounts.

3. DUTY AND TAXES

Customs clearance is handled and duty is paid by the Company when the goods enter the U.S.A. and the customer has no additional duty or brokerage charges to pay. Prices quoted do not include any applicable U.S. Federal or State taxes.

4. DELIVERY

The Company will use its best efforts to make delivery in the time specified but shall not be held responsible for any loss or other consequence as a result of delay in delivery of the equipment. If the Company is unable to deliver the whole or any part of the order due to reasons outside the Company's control, the Company has the right to cancel or suspend the whole or part order.

5. QUARANTEE

The Company's components are guaranteed to be of sound material and good workmanship. Under such guarantee the Company will at its option either repair or replace without charge any standard part of the said component which becomes defective in proper use and fair wear and tear within a period of 12 months from date of shipment of the component provided the Company is promptly notified in writing of such defect occurring and the defective part is returned carriage paid to Decca Radar Canada (1967) Limited, Toronto, Canada.

Notwithstanding the guarantee terms as herein stated the Company shall have no liability under any warranty or condition implied by law or for any consequential loss or damage occurring to any structure or building on which the said component is permanently or temporarily located nor to any person or persons acting in connection with such components.

6. ORDERS

Should be made out to Austin Insulator Division, Daces Radar Casada (1967) Limited.

7. GOVERNMENT PERMITS

Any equipment is offered subject to the granting of import and/or Expert permits - by any Government concerned.

8. INJURY, LOSS OR DAMAGE

The customer shall indemnify the Company against all claims whether made under any contract or statute or under Common Law in respect of any loss or damage to any property whatsoever or injury to any person whatsoever arising out of any defect in material or workmanship in connection with any goods manufactured and/or sold by the Company, or any default or negligence on the part of the Company's servants in connection with or during the carrying out of any work by the Company on customer's or other person's property.

9. ACCEPTANCE OF QUOTATION

Acceptance of the Company's written quotation shall be taken as acceptance also of these terms and conditions of sale subject to any variation thereto agreed by the Company in writing.

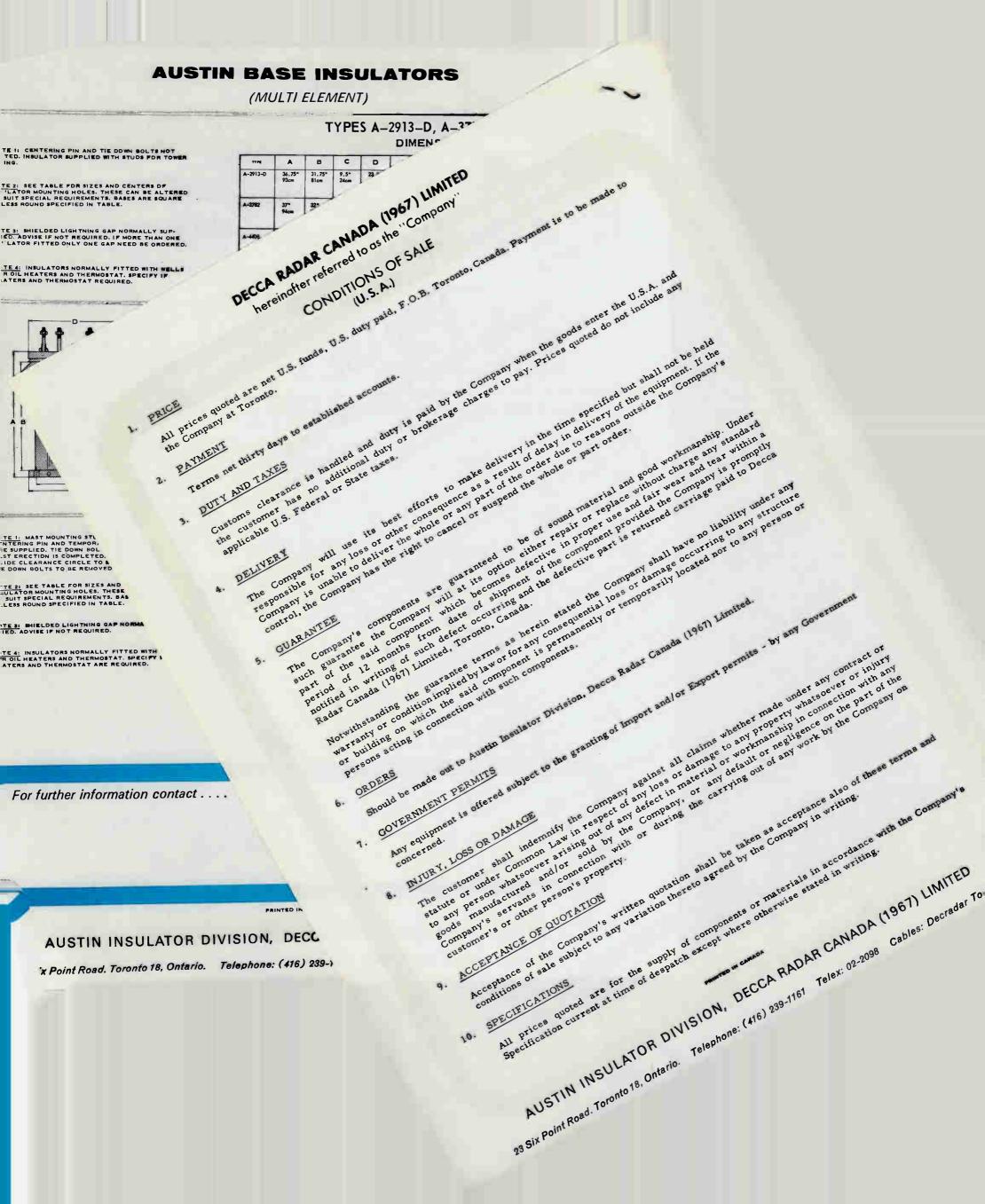
19. SPECIFICATIONS

All prices quoted are for the supply of components or materials in accordance with the Company's Specification current at time of despatch except where otherwise stated in writing.

MINTED IN CANADA

AUSTIN INSULATOR DIVISION, DECCA RADAR CANADA (1967) LIMITED

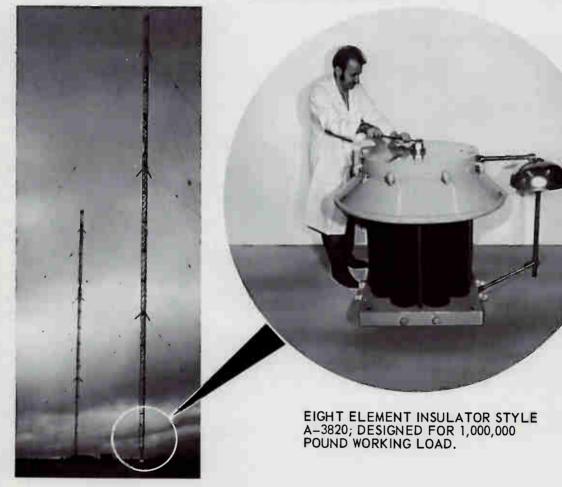




AUSTIN INSULATOR DIVISION

AUSTIN BASE INSULATORS for RADIO ANTENNA MASTS AND TOWERS

(MULTI ELEMENT)



A-3663, A-3663-B, A-4447, A-3820-R, A-4544 Suitable for use with guyed masts.

A-2913-D, A-3782, A-4408 Suitable for applications where load may be applied in tension or compression as on self supporting towers.

Porcelain is always loaded in compression, the load in tension is taken on an internal high strength link.

- Oil filled to eliminate losses due to water condensation on internal surfaces. Thermostatically controlled heaters eliminate condensation on external surfaces.
- Smooth insulator finish minimizes leakage and flashover due to surface contamination.

SPECIFICATIONS OF AUSTIN MULTI-ELEMENT OIL FILLED BASE INSULATORS TO MEET OTHER ELECTRICAL OR MECHANICAL REQUIREMENTS ARE AVAILABLE ON REQUEST.

AUSTIN BASE INSULATORS

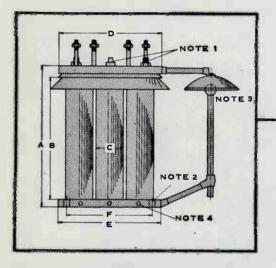
(MULTI ELEMENT)

NOTE 1: CENTERING PIN AND THE DOWN BOLTS NOT FITTED. INSULATOR SUPPLIED WITH STUDS FOR TOWER FIXING.

NOTE 2: SEE TABLE FOR SIZES AND CENTERS OF INSULATOR MOUNTING HOLES. THESE CAN BE ALTERED TO SUIT SPECIAL REQUIREMENTS. BASES ARE SQUARE UNLESS ROUND SPECIFIED IN TABLE.

NOTE 3: SHIELDED LIGHTNING GAP NORMALLY SUP-PLIED. ADVISE IF NOT REQUIRED. IF MORE THAN ONE INSULATOR FITTED ONLY ONE GAP NEED BE ORDERED.

NOTE 41 INSULATORS NORMALLY FITTED WITH WILLS FOR OIL HEATERS AND THERMOSTAT. SPECIFY IF HEATERS AND THERMOSTAT REQUIRED.



NOTE 1: MAST MOUNTING STUDS NOT FITTED. A MÅST CENTËRING PIN AND TEMPORARY TIE DOWN BOLTS ARE SUPPLIED. TIE DOWN BOLTS ARE REMOVED WHEN MAST ERECTION IS COMPLETED. MAST BASE MUST BE INSIDE CLEARANCE CIRCLE TO ENABLE TEMPORARY TIE DOWN BOLTS TO BE REMOVED.

NOTE 2: SEE TABLE FOR SIZES AND CENTERS OF INSULATOR MOUNTING HOLES. THESE CAN BE ALTERED TO SUIT SPECIAL REQUIREMENTS. BASES ARE SQUARE UNLESS ROUND SPECIFIED IN TABLE.

NOTE 3: SHIELDED LIGHTNING GAP NORMALLY SUF-

NOTE 4: INSULATORS NORMALLY FITTED WITH WELLS FOR OIL HEATERS AND THERMOSTAT. SPECIFY IF HEATERS AND THERMOSTAT ARE REQUIRED.

TYPES A-2913-D, A-3782, A-4408	
DIMENSIONS	

~>

TYPE	A	B	С	D	E	F	MAST FIERE	NEULATOR	
A-2913-D	36.75" 93cm	31,75" 81cm	9.5" 24cm	23.5" 60cm dia.	22.5* 57cm	18.5" 47cm	6 studs 1-1/4" (3.18cm) die. 7" (17.8cm) long 12 TPI nuts supplied On 12.25" (31.1cm) PCD	4 holes drilled 1-5/8" (4.13cm)	1050 Hs. 476 kg
A-3782	37" 94cm	32* 81cm	9.5" 24cm	30" 76cm dia.	30" 76cm	24" 61cm	5 studs 1-3/4" (4.45cm) dia. 8" (20.3cm) long 12 TPI nuts supplied On 18" (46cm) PCD	4 holes drilled 2-3/8" (6.03am)	1700 lbs. 771 kg
A-48)6	42" 107cm	94" Nican	1)* 20m	50 ⁴ 127cm die.	57" 145cm dia.	See mounting details	10 stude 2-1/4" (5.72cm) dia. 8" (25.4cm) long 4.5 TPI nuts supplied On 37.5" (95cm) PCD	10 holes drilled 2-1/2" (6.35cm) On 52" (132cm) PCD Round base	6865 lbs. 3114 kg

SPECIFICATIONS

TYPE	BLEMENTS	ARCING VOLTAGE KV RME DRY	MAX MUM WORKING DOWNLOAD	WORKING UPLIFT	ULTIMATE TENSION	LOAD ING
A-2913-D	3	285	660,000 lbs. 299,376 kg	175,000 lbs. 79,380 kg	660,000 lbs. 599,376 kg	330,000 lbs. 149,688 kg
A-3782	5	285	1,000,000 lbs, 435,600 kg	300,000 lbs. 136,080 kg	1,000,000 lbs. 435,600 kg	500,000 lbs. 226,800 kg
A-4408	10	300	2,400,000 lbs. 1,088,640 kp	750,000 lbs. 340,200 kp	2,400,000 lbs.	1,200,000 lbs. 544,320 kg

TYPES A-3663, A-3663-B, A-4447, A-3820-R, A-4544 DIMENSIONS

TYPE	A	в	c	D	E	F	MAST FIEMS		WE IGHT
A-3663	19" 48cm	15" 38cm	6.5" 16.5cm	18" 46cm dio.	17* 43cm	See mounting details	Centre pin 1.5" (3.8cm) die. 13" (3.8cm) long Clearance dia. 13" (33cm)	3 holes drilled 1-1/8" (2.86cm) On 15" (38cm) PCD Round base	480 lbs. 218 kg
A-3663-8	34° Biom	.30* 76an	6.5" 16.5cm	18" 46an dia.	17" 43cm	See mounting details	Centre pin 1.5" (3.8cm) dio. 1½" (3.8cm) long Člevrance dia. 13" (33cm)	3 holes drilled 1-1/8" (2,86cm) On 15" (38cm) PCD Round base	530 lbs, 240 kg
A-4447-B	36" 91cm	31 * 79cm	6.5" 16.5cm	21 * 53cm dia.	21 * 53cm	18" 46cm	Centre pin 1.5" (3.8cm) dia. 2" (5cm) long Clearance dia. 16" (41cm)	4 holes drilled 1-3/8" (3.5cm)	1005 lbs. 456 kg
A-3820	37.5" 95cm	30* 76cm	6.5" 16.5cm	27.5" 70cm dia.	27.5* 70cm	24" ólam	Centre pin 3½" (8.9cm) dia. 3/4" (1.9cm) long Clearance dia. 22.5" (57cm)	4 holes drilled 1-5/8° (4, 13am)	1995 lbs. 860 kg
A-4544	40" 102cm	30* 76cm	6.5" 16.5m	34 " 86cm dia.	34" 86cm	30" 76cm	Centre pin 3½" (8.9cm) dia, 3/4" (1.9cm) long Clearance dia, 29" (74cm)	4 holes drilled 1-5/8" (4.13cm)	3700 lbs. 1678 kg

SPECIFICATIONS

TYPE	BLEMENTS	ARCING VOLTAGE EV RMS DRY	HAT MEN TORENE POWILEAS	ULTINATE
A-3663	3	140	250,000 lbs. 113,400 kg	1,000,000 lbs. 453,600 kg
A-3663-8	3	280	250,000 lbs, 113,400 kg	1,000,000 lbs. 453,600 kg
A-4447	5	290	600,000 lbs. 272,160 kg	2,500,000 lbs. 1,134,000 kg
A-3820-R	8	280	1,000,000 lbs. 453,600 kg	4,500,000 lbs. 2,041,200 kg
A-4544	12	280	1,500,000 lbs. 680,400 kg	7,000,000 lbs. 3,175,200 kg

For further information contact

PRINTED IN CANADA

AUSTIN INSULATOR DIVISION, DECCA RADAR CANADA (1967) LIMITED

AUSTIN INSULATOR DIVISION

Price List (U.S.A.)

AUSTIN BASE INSULATORS for

RADIO ANTENNA MASTS AND TOWERS

(MULTI ELEMENT)

түре	PRICE (U.S. FUNDS) DUTY PAID F.O.B. TORONTO
A-3663	\$ 650.00
А-3663-В	800.00
A-4447	1,500.00
A-3820-R	3,000.00
A-4544	5,500.00
A-2913-D	2,500.00
A-3782	4,000.00
A-4408	10,000.00

If lightning gap not required - deduct \$75.00 If heaters and thermostat fitted - add \$20.00 per element

PLEASE REFER TO DECCA RADAR CANADA (1967) LIMITED, AUSTIN INSULATOR DIVISION, STANDARD CONDITIONS OF SALE OVERLEAF.

DECCA RADAR CANADA (1967) LIMITED

hereinafter referred to as the "Company"

CONDITIONS OF SALE (U.S.A.)

1. PRICE

All prices quoted are net U.S. funds, U.S. duty paid, F.O.B. Toronto, Canada. Payment is to be made to the Company at Toronto.

2. PAYMENT

Terms net thirty days to established accounts.

3. DUTY AND TAXES

Customs clearance is handled and duty is paid by the Company when the goods enter the U.S.A. and the customer has no additional duty or brokerage charges to pay. Prices quoted do not include any applicable U.S. Federal or State taxes.

4. DELIVERY

The Company will use its best efforts to make delivery in the time specified but shall not be held responsible for any loss or other consequence as a result of delay in delivery of the equipment. If the Company is unable to deliver the whole or any part of the order due to reasons outside the Company's control, the Company has the right to cancel or suspend the whole or part order.

5. GUARANTEE

The Company's components are guaranteed to be of sound material and good workmanship. Under such guarantee the Company will at its option either repair or replace without charge any standard part of the said component which becomes defective in proper use and fair wear and tear within a period of 12 months from date of shipment of the component provided the Company is promptly notified in writing of such defect occurring and the defective part is returned carriage paid to Decca Radar Canada (1967) Limited, Toronto, Canada.

Notwithstanding the guarantee terms as herein stated the Company shall have no liability under any warranty or condition implied by law or for any consequential loss or damage occurring to any structure or building on which the said component is permanently or temporarily located nor to any person or persons acting in connection with such components.

6. ORDERS

Should be made out to Austin Insulator Division, Decca Radar Canada (1967) Limited.

7. GOVERNMENT PERMITS

Any equipment is offered subject to the granting of Import and/or Export permits - by any Government concerned.

8. INJURY, LOSS OR DAMAGE

The customer shall indemnify the Company against all claims whether made under any contract or statute or under Common Law in respect of any loss or damage to any property whatsoever or injury to any person whatsoever arising out of any defect in material or workmanship in connection with any goods manufactured and/or sold by the Company, or any default or negligence on the part of the Company's servants in connection with or during the carrying out of any work by the Company on customer's or other person's property.

9. ACCEPTANCE OF QUOTATION

Acceptance of the Company's written quotation shall be taken as acceptance also of these terms and conditions of sale subject to any variation thereto agreed by the Company in writing.

10. SPECIFICATIONS

All prices quoted are for the supply of components or materials in accordance with the Company's Specification current at time of despatch except where otherwise stated in writing.

PRINTED IN CANADA

AUSTIN INSULATOR DIVISION, DECCA RADAR CANADA (1967) LIMITED



AUSTIN INSULATOR DIVISION

AUSTIN BASE INSULATORS for RADIO ANTENNA MASTS AND TOWERS

(SINGLE ELEMENT)



THE DESIGN OF AUSTIN BASE INSULATORS RESULTS FROM DECADES OF RADIO INSULATOR EXPERIENCE AND IS ATTESTED BY THE PROVEN RELIABILITY OF THE THOUSANDS IN USE THROUGHOUT THE WORLD.

TYPES A-2360-S, A-4881,. A-4729 AND A-3167-D

- Suitable for applications where load may be applied in tension or compression as on self supporting towers.
- Porcelain is always loaded in compression, the load in tension is taken on an internal high strength link.

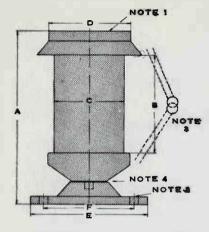
TYPES A-4197-S, A-4197-L, A-4722 AND A-4722-B

- Suitable for use with guyed masts.
- Porcelain loaded in compression only.
- Oil filled to eliminate losses due to water condensation on internal surfaces.
- Smooth insulator finish minimizes leakage and flashover due to surface contamination.
 - SPECIFICATIONS OF SINGLE AND MULTI ELEMENT OIL FILLED BASE INSULATORS FOR HIGHER VOLTAGES AND/OR MECHANICAL LOADS ARE AVAILABLE ON REQUEST.

AUSTIN BASE INSULATORS

(SINGLE ELEMENT)

TYPES A-4197-S, A-4197-L, A-4722, A-4722-B



TYPE	A	в	С	D	E	F	HAST FILMOS (HOTE 1)	MSULATOR MOUNTING (HOTE 3)	HET WEIGHT
A-4197-5	11.6" 29cm	5" 13cm	4" 10cm dia.	7,25" 18cm did.	7" 18cm dia.	-	3 holes drilled 5/8" 1.6cm on 6.5" (16.5cm) PCD	3 holes drilled 5/8" 1.6cm on 5.5" (14cm) PCD	42 lbs. 19 kg
A-4197-L	13.6* 35cm	7* 18am	4" 10cm dia.	7.25* 18cm dio,	7" 18cm dio.	•	3 holes drilled 5/8" 1.6cm on 6.5" (16.5cm) PCD	3 holes drilled 5/8" 1.6cm on 5.5" (14cm) PCD	45 lbs. 20 kg
A-4722	20.625" 52cm	12* 30om	6.5" 17cm dia.	7.85" 20cm dio.	10" 25cm dia,	8" 20,3cm	3 holes tapped 5/8" 1.6cm 11 TP1 on 6.5" (16.5cm) PCD	4 holes drilled 3/4" 1.9cm on 8" (20.3cm) PCD	90 lbs. 41 kg
A-4722-8	26.125" 66cm	17.5" 44am	6.5" 17cm dio.	7.85" 20cm dia,	10" 25cm dio,	8° 20.3am	3 holes topped 5/8" 1.6cm 11 TPI on 6.5" (16.5cm) PCD	4 holes drilled 3/4" on 8" (20.3cm) PCD	108 lbs. 49 kg

DIMENSIONS

SPECIFICATIONS

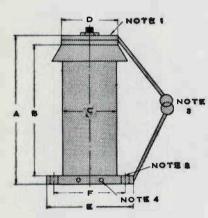
NOTE 1: SEE TABLE FOR MAST MOUNTING STUD SIZES. CAN BE ALTERED TO SUIT SPECIAL REQUIREMENTS. NOTE 2: SEE TABLE FOR SIZE AND CENTRES FOR INSULATOR MOUNTING HOLES. NOTE 3: LIGHTNING GAP IS OPTIONAL.

NOTE 4: INSULATOR AND MOUNTING PLATE ARE TWO PIECES.

TYPE	ARCING VOLTAGE KV R.M.S. DRY	WORKING LOAD	ULTHAATE LOAD
A-4197-5	69	40,000 lbs. 18,140 kg	150,000 lbs. 68,030 kg
A-4197-L	85	40,000 lbs. 18,140 kg	150,000 lbs. 68,030 kg
A-4722	\$7	80,000 lbs. 36,280 kg	345,000 lbs. 156,460 kg
A-4722-8	140	80,000 lbs. 36,280 kg	345,000 lbs. 156,460 kg

TYPES A-2360-S, A-4881, A-4729, A-3167-D

DIMENSIONS



TYPE	A	B	с	D	E	F	MAST FIXING (NOTE 1)	MSULATOR MOUNTING (NOTE 2)	WEIGHT
A-2360-5	28" 71cm	24" 61cm	8.25" 21cm dio.	8.30" 21cm dia,	10.5" 27cm	8.125" 21am	3 studs 1" (2.54cm) die. 4.75" (12cm) long. 14 TPL. Nuts supplied. On 6.25" (16cm) PCD.	4 holes drilled 1-1/16" (2.7cm)	140 lbs. 64 kg
A-4891	36.5" 93cm	38" 84om	8.25" 21cm dia.	8.30" 21cm dic.	10.5* 27em	8, 125* 21cm	3 studs 1" (2, 54cm) dia. 4,75" (12cm) long. 14 TPI. Nuts supplied. On 6:25" (16cm) PCD.	4 holes drilled 1-1/16" (2.7cm)	165 lbs. 75 kg
A-4729	37.25* 95cm	33" 84cm	9.75" 25cm dia.	12" 30cm dia.	72° 30cm	9.0ª 23cm	3 studs 1" (2.54cm) dia. 6.8" (17cm) long. 14 TPI. Nuts supplied. On 10" (25cm) PCD.	4 holes drilled 1-1/4# (3.2cm)	300 lbs. 136 kg
A-3167-D	36.5* 93cm	30° 76om	11" 29cm dio.	12" 30cm dia,	13* 30cm	10.6* 27om	3 studs 1" (2.54cm) dia. 6.8" (17cm) long. 14 TPI. Nuts supplied. On 10" (25cm) PCD.	4 holes drilled 1-1/8" (2.9cm)	411 lbs. 186 kg

NOTE 1: SEE TABLE FOR MAST MOUNTING STUD SIZES. CAN BE ALTERED TO SUIT SPECIAL REQUIREMENTS. NOTE 2: SEE TABLE FOR SIZE AND CENTRES FOR INSULATOR MOUNTING HOLES. NOTE 3: LIGHTNING GAP IS OPTIONAL. NOTE 4: ALL BASES ARE SQUARE AND FITTED

WITH WELLS FOR OIL HEATERS AND THERMOSTATS.

SPECIFICATIONS

TYPE	ARCING VOLTAGE KV R.M.S. DRY	MAXIMUM WORKING DOWNLOAD	WORKING UPLIFT	ULTMATE TENSION	PRE-
A-2360-5	225	200,000 lbs. 90,700 kg	25,000 lbs. 11,340 kg	80,000 lbs. 36,280 kg	40,000 lbs. 18,140 kg
A-4881	290	200,000 lbs.	30,000 lbs. 13,600 kg	85,000 lbs.	45,000 lbs.
A-4729	290	400,000 lbs. 181,400 kg	60,000 lbs. 27,210 kg	200,000 lbs. 90,700 kg	100,000 ibs. 45,350 kg
A-3167-D	280	500,000 lbs. 226,750 kg	60,000 lbs. 27,210 kg	200,000 lbs. 90,700 kg	100,000 lbs. 45,350 kg

For further information contact

PRINTED IN CANADA

AUSTIN INSULATOR DIVISION, DECCA RADAR CANADA (1967) LIMITED

AUSTIN INSULATOR DIVISION

Price List

AUSTIN BASE INSULATORS

for

RADIO ANTENNA MASTS AND TOWERS

(SINGLE ELEMENT)

TYPE	PRICE (U.S. FUNDS) DUTY PAID F.O.B. TORONTO
A-4197-S	\$140.00
A-4197-L	150.00
A-4722	200.00
A-4722-B	225.00
Lightning gap for above group	15.00
A-2360-S	450.00
A-4881	550.00
A-4729	650.00
A-3167-D	775.00
Lightning gap for above group	30.00

PLEASE REFER TO DECCA RADAR CANADA (1967) LIMITED, AUSTIN INSULATOR DIVISION, STANDARD CONDITIONS OF SALE OVERLEAF.

DECCA RADAR CANADA (1967) LIMITED

hereinafter referred to as the "Company"

1. PRICE

CONDITIONS OF SALE (U.S.A.)

All prices quoted are net U.S. funds, U.S. duty paid, F.O.B. Toronto, Canada. Payment is to be made to the Company at Toronto.

2. PAYMENT

Terms net thirty days to established accounts.

3. DUTY AND TAXES

Customs clearance is handled and duty is paid by the Company when the goods enter the U.S.A. and the customer has no additional duty or brokerage charges to pay. Prices quoted do not include any applicable U.S. Federal or State taxes.

4. DELIVERY

The Company will use its best efforts to make delivery in the time specified but shall not be held responsible for any loss or other consequence as a result of delay in delivery of the equipment. If the Company is unable to deliver the whole or any part of the order due to reasons outside the Company's control, the Company has the right to cancel or suspend the whole or part order.

5. GUARANTEE

The Company's components are guaranteed to be of sound material and good workmanship. Under such guarantee the Company will at its option either repair or replace without charge any standard part of the said component which becomes defective in proper use and fair wear and tear within a period of 12 months from date of shipment of the component provided the Company is promptly notified in writing of such defect occurring and the defective part is returned carriage paid to Decca Radar Canada (1967) Limited, Toronto, Canada.

Notwithstanding the guarantee terms as herein stated the Company shall have no liability under any warranty or condition implied by law or for any consequential loss or damage occurring to any structure or building on which the said component is permanently or temporarily located nor to any person or persons acting in connection with such components.

6. ORDERS

Should be made out to Austin Insulator Division, Decca Radar Canada (1967) Limited.

7. GOVERNMENT PERMITS

Any equipment is offered subject to the granting of Import and/or Export permits - by any Government concerned.

8. INJURY, LOSS OR DAMAGE

The customer shall indemnify the Company against all claims whether made under any contract or statute or under Common Law in respect of any loss or damage to any property whatsoever or injury to any person whatsoever arising out of any defect in material or workmanship in connection with any goods manufactured and/or sold by the Company, or any default or negligence on the part of the Company's servants in connection with or during the carrying out of any work by the Company on customer's or other person's property.

9. ACCEPTANCE OF QUOTATION

Acceptance of the Company's written quotation shall be taken as acceptance also of these terms and conditions of sale subject to any variation thereto agreed by the Company in writing.

10. SPECIFICATIONS

All prices quoted are for the supply of components or materials in accordance with the Company's Specification current at time of despatch except where otherwise stated in writing.

HNTED IN CANADA

AUSTIN INSULATOR DIVISION, DECCA RADAR CANADA (1967) LIMITED