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3M™ TA570 Chainsaw Combination Kit

Technical Data Sheet

Product description

The Chainsaw Combination Kit consists of a 3M™ TA570 Series ABS Type 1 vented safety helmet, 3M™ PELTOR™ X4 Series Helmet Attach Earmuffs and 3M™ PELTOR™ V4B mesh visor and peaked visor holder.

Features

- Complete protection in one package
- Polyamide mesh visor for protection against large dust particles
- V4B Polyamide Visor System offers eye and face protection from flying wood chips and large particles, whilst allowing fog-free vision and increased ventilation when in difficult outdoor conditions
- Additional/secondary eye protection should be worn.
- The 3M™ PELTOR™ X4 Series Helmet Attach Earmuffs can attenuate by as much as 26dB whilst maintaining a sleek, low profile aesthetically pleasing design.

Applications

Suitable for applications where the head, hearing and low to medium impact face protection is required. This kit is suitable for forestry and timber processing applications.

The Australian Manufactured TA570 (vented) safety helmet has been designed to meet the requirements of AS/NZS 1801 for shock absorption, resistance to penetration, lateral stiffness, ignition by flame and electrical insulation (electrical hazards up to 650V) when tested in the hot (+50°C), cold (-50°C) and wet conditions.

Type 1 safety helmets are suitable for general industrial applications.

The 3M™ PELTOR™ X Series earmuffs are ideal for protection against noise arising from a wide range of applications in the workplace and leisure activity. Examples of typical applications include airports, construction, forestry, manufacturing as well as mining and utilities.

The PELTOR™ mesh visor provides medium impact protection against large dust particles and abrasion, in particular, forestry applications and should be worn in conjunction with medium impact safety spectacles approved to AS/NZS 1337.1.

Approval Information

The TA570 is certified to AS/NZS 1801:1997 Type 1 ABS, for general industrial use.

The Mesh Visor meets the impact requirements of AS/NZS 1337.2.

The 3M™ PELTOR™ X Series X4P3 Helmet Attach Earmuff have been tested by an accredited laboratory in accordance with the requirements specified in the Australian/New Zealand Standard AS/NZS1270:2002.

Attenuation Data

3M™ PELTOR™ X4P3* Helmet Attach Earmuffs

AS/NZS 1270:2002

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SLC_{80}	Class	Clamp Force
Mean Attenuation (dB)	14.8	18.6	24.4	34.0	36.3	42.9	42.2			
Standard Deviation (SD) (dB)	5.1	5.9	5.5	5.5	3.8	6.1	7.0	26 dB	5	9.6 N
Mean minus SD (dB)	9.7	12.7	18.9	18.9	32.5	36.8	35.2			

Hearing protector Class 5 tested to AS/NZS1270. When selected, used and maintained as specified in AS/NZS1269, this protector may be used in noise up to 110dB(A) assuming an 85dB(A) criterion. A lower criterion may require a higher protection class.

* These earmuffs were tested in combination with the 3M™ TA570 Industrial Safety Helmet using the P3GS adapter and may give different levels of protection if fitted to different helmets.

Mean = Mean attenuation value derived from testing in accordance with AS/NZS 1270:2002.
SD = Standard Deviation derived from testing in accordance with AS/NZS 1270:2002.
Mean-SD = Mean attenuation value minus Standard Deviation.
SLC_{80} = Single number rating commonly used in Australia and New Zealand to compare acoustic performance of hearing protectors. The subscript '80' indicates that in well managed hearing protector programs, the protection provided is expected to equal or exceed the SLC_{80} in 80% of protector-wearer noise spectrum combinations.
Class = A simplified process for selecting hearing protectors based on the wearers 8-hour equivalent continuous A-weighted sound pressure level.

3M strongly recommends personal fit testing of hearing protectors. Research suggests that users may receive less noise reduction than indicated by the attenuation label value(s) on the packaging due to variation in fit, fitting skill, and motivation of the user. Refer to applicable regulations and guidance on how to adjust attenuation label value(s). In the absence of applicable regulations, it is recommended that the attenuation label value(s) be reduced to better estimate typical protection.

The effectiveness of a hearing protector reduces dramatically when the hearing protector does not fit properly, is incorrectly inserted, or is not worn 100% of the time during ALL hazardous noise events. Removal of the hearing protector, even for brief moments, substantially reduces protection and greatly increases the risk of hearing damage.

Specifications

Attenuation Data

SLC_{80}	26dB
Class	5
Helmet Attachment Backplate	On Product P3GS (25mm) Loose in Box P3E (30mm)

Materials

Earmuff Cup Material	Injection molded ABS (plastic), Thermoplastic Polyurethane
Helmet Attachment Arm	Stainless steel wire, Acetal, Polyamide
Earmuff Wire	Stainless steel
Earmuff Cushion Material	PVC and PUR Foam
Earmuff Cup Insert (Liner)	PU Foam
Earmuff Cup Colour	Light Green/Black
Weight of Earmuff	237 g
Earmuff Clamping Force	12.5 N
Visor Colour	Black
Visor Material	Polyamide Mesh
Visor Dimensions	Overall Height (Metric) 28.96 cm Overall Width (Metric) 13.97 cm
Weight Visor/Earmuff Combined	307 g
Visor Net Weight (Metric)	70 g
Helmet Shell Material	Injection moulded ABS (plastic)
Helmet Vented or Unvented	Vented
Helmet Harness Cradle	25mm nylon webbing 6 point
Helmet Weight	260 g approx.
Helmet Harness Segments	Injection moulded HDPE (high density polyethylene)
Helmet Harness Headband	LDPE (low density polyethylene)
Helmet Shell Colour	White
Helmet Rating	Type 1 (Industrial)

Types of Safety Helmets

The scope of AS/NZS 1801:1997 standard specifies requirement for occupational protective helmets to protect wearers heads from falling objects in building and construction, quarrying, shipbuilding, forestry, and other occupations with similar hazards. These requirements include the construction and materials of the helmet shell and head harness, mechanical strength of the shell and finish of the helmet.

In compliance with the standards objectives to specify protective helmets that are worn in a variety of occupations. 3M brand safety helmets are classified into three types:

Faceshield Markings

Impact protection is determined by the metres per second in which a projectile travels. A special test rig fires a 6.35mm ball at either 12m, 40m or 120m per second.

Standard	Rating	Ball Speed	Impact Protection Situation
AS/NZS 1337.1:2010	Low Impact	12m/sec	Hammering, handling wire, brick chipping by hand
AS/NZS 1337.1:2010	Medium Impact	40m/sec	Grinding, machining metals, woodworking
AS/NZS 1337.1:2010	High Impact	120m/sec	Concrete cutting, high speed disc grinding, metal cutting

Selecting eye/face protection is very much about identifying the hazards and assessing the risks. Selecting the wrong type of PPE can have serious consequences. It is important to consider the velocity, size and the nature of the hazard when evaluating eye/ face protection.

Australian/New Zealand Standards AS/NZS 1336:1997 is an excellent reference document and provides assistance.

Markings & Working Life of Safety Helmets

Markings on safety helmets are a requirement for certification. It assists users in identifying their intended use. The shell is moulded with very important information stamped on the peak and you should familiarise yourself with the significance of this labelling.

Australian/New Zealand Standards AS/NZS 1801:1997 is an excellent reference document and provides assistance.

Every 3M brand safety helmet has an issue date sticker on the inside of the shell for wearers to record their name and date of issue. Three years hence remove the helmet from use or earlier if the helmet has changed in colour, exhibits any signs of wear or damage due to impact or deterioration. (AS/NZS 1800:1998 3.4).

If the sticker has not been used or removed, replace the helmet three years from the manufacture date stamp under the brim or peak of the helmet. In the centre of the stamp is the year with a directional arrow pointing to the month of the year in which the helmet was made.

Maintenance/Cleaning

Hearing protectors should be inspected prior to use for damage or deterioration. Damaged or worn parts should be replaced prior to use. The noise reduction will only be obtained if the earmuffs are in good order and worn as directed. Regular cleaning using warm water and soap. Components should be dried prior to use. Mild detergent and hygiene wipes can be used on this product; however, some products may harden or damage the cushion. Hygiene kit/ cushions should be replaced when the cushion show signs of damage or hardening.

Avoid exposure or contact of the faceshield with vapour or liquids which may cause surface crazing and reduce the impact resistance. Inspect and clean the faceshield regularly and replace if broken or damaged. Thoroughly clean all surfaces with lens cleaner or mild soap solution. Do not clean the faceshield with solvents. Air dry or pat dry with clean, soft cloth or tissue. The use of solvents, harsh detergents or abrasives is not recommended. Avoid exposure to MEK, Sulphuric Acid, Methylene Chloride, Toluene, Paint Thinner and Acetone.

The safety helmet should be kept in good condition and cleaned regularly using warm water and/or a mild detergent only. A brush can be used to remove stubborn marks from the shell. Prior to washing, the harness should be removed from the shell to facilitate cleaning. The use of solvents, very hot water or harsh abrasives is not recommended. Worn or damaged headgear parts should be replaced immediately, and damaged shells (splits, cracks, dents or excessive abrasion, discolouration or weathering of the shell surface) should be discarded. Accessories must be OEM components and never use a makeshift chinstrap.

Accessories must be OEM components and never use a makeshift chinstrap. A chinstrap whilst a simple component is designed to meet specific breaking loads. This is to prevent serious accidents from occurring.

Working Life and Storage of A Safety Helmet

All information pertaining to selection, care and use is available in AS/NZS 1800:1998. Based upon industrial field tests Australian and New Zealand standards recommend, in general terms, an industrial safety helmet should be replaced every three years from the date of issue, and the harness should be replaced every 2 years. Harsh conditions and/or rough usage dictate that a helmet may be replaced sooner. Every 3M brand safety helmet has an issue date sticker on the inside of the shell for wearers to record their name and date of issue. Three years hence remove the helmet from use or earlier if the helmet has changed in colour, exhibits any signs of wear or damage due to impact or deterioration (AS/NZS 1800:1998 3.4). If the sticker has not been used or removed, replace the helmet three years from the manufacture date stamp under the brim or peak of the helmet. In the centre of the stamp is the year with a directional arrow pointing to the month of the year in which the helmet was made.

Storage is part of ongoing care and maintenance but is so often overlooked. Care should be taken to ensure your safety helmet, when not in use, is stored appropriately and not exposed to possible damage.

Refrain from leaving it sitting near the rear window of a car as it is exposed to intensified heat, sunlight and becomes a flying projectile in the event of a car accident or sudden braking.

Fitting

- Clip visor assembly onto earmuff headband above ear cups, Smooth hair away from ears
- Pull ear cups down to lowest position and place them securely over ears.
- Centre headband on head and adjust headband at cups for comfortable, secure fit.
- For maximum comfort and protection, contact pressure points should be equal, with ear cups level as possible and visor in line with the face.

Disposal

If the product is to be disposed of, it should be disassembled and disposed of as solid waste. Please see local authority regulations for disposal advice and locations.

Ordering Information

3M ID	Model	Description
AT019447112	TA570WHKIT7	3M™ TA570 Chainsaw Helmet
UU010818886	X4P3GS/E	3M™ PELTOR™ X4P3 Helmet Attach Earmuffs
XH001650239	V4B	3M™ PELTOR™ Mesh Visor

WARNING!
These hearing protectors help reduce exposure to hazardous noise and other loud sounds. Misuse or failure to wear hearing protectors at all times that you are exposed to noise may result in hearing loss or injury. For proper use, see supervisor, User Instructions, or call 3M TechAssist Helpline 1800 024 464.

Always ensure the hearing protection device (HPD) is:

- Suitable for the application;
- Fitted correctly;
- Worn during all periods of exposure;
- Replaced when necessary.

Important Notice: To the extent permitted by law, 3M shall not be liable for any loss or damage including any loss of business, loss of profits, or for any indirect, special, incidental or consequential loss or damage arising from reliance upon any information herein provided by 3M. Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence.

3M Australia Pty Ltd
Personal Safety Division
Bldg A, 1 Rivett Road
North Ryde NSW 2113

TechAssist Helpline 1800 024 464
Customer Service 1300 363 565
Email techassist@mmm.com
Web www.3M.com.au/ppesafety

3M New Zealand Ltd
Personal Safety Division
94 Apollo Drive, Rosedale
Auckland 0632

TechAssist Helpline 0800 364 357
Customer Service 0800 252 627
Email 3mnzitb@mmm.com
Web www.3m.com.nz/ppesafety