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Vocabulary of Army Ordnance Stores

SECTION Z 6

ELECTRONIC GUN CONTROL EQUIPMENT

1965

(Supersedes Code No. 11344)

By Command of the Defence Council.

A handwritten signature in black ink, appearing to read 'Henry [unclear] [unclear]'. The signature is written in a cursive style.

MINISTRY OF DEFENCE
JUNE 1965

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VOCABULARY OF ARMY ORDNANCE STORES - SECTION Z6

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SECTION Z6

Cat. No.	Item name or designation	Item description or detail	I.S.P.L. Code No.
Z6/ZF/FV 178514	AMPLIFIER, ELECTRONIC CONTROL Elevation, No. 1, Mk. 5	Similar in function and dim. to Z6/ZF/FV 169253 except that the gun frequency network is tuned to 18.5 c/s.	12969 Pt. 2
Z6/1290-99-200-9652	Elevation Coupling, No. 1, Mk. 3	This unit consists of an A.C. amplifier and associated Phase-Conscious Rectifier, and also a D.C. amplifier. The unit is contained within a steel prefabricated structure. Electrical connections are made through a 24 pole plug	
Z6/1290-99-200-9650	Servo Output, No. 1, Mk.2	Electrical data Supply Voltages:- -300-0-+300 V., D.C. earth tapped to earth 115V., A.C. 400 c/s 12.6 A.C. heater supply, centre tapped O/A. dim:- 12.11/16 long x 6.1/32 high x 2.1/4 in. wide The output currents of this unit (known as "output differential current") are for excitation of the variator windings of both elevation and traverse metadynes. The unit is contained within a steel prefabricated structure. Electrical connections are made through a 24 pole plug.	

Z6/1290-99-200-9651	Traverse Coupling, No. 1, Mk. 3	Electrical data Supply Voltages:- 600V. D.C. centre tapped to earth + 300 V., D.C.; 12.6 V., A.C. heater supply, centre tapped O/A. dim:- 12.11/16 long x 6.1/32 high x 2.1/4 in. wide This unit is used in the turret traversing system all other details as for:- Z6/1290-99-200-9652	13929
Z6/ZF/FV 128431	AMPLIFIER, Gun control, elevation No. 1., Mk. 1	A three stage 4 valve amplifier, its main function being:- (a) To allow A.C. input voltages to control the D.C. output currents which determine the speed and direction of movement of the gun in elevation motion (b) To amplify the A.C. input so that the D.C. output currents are sufficient to excite the control windings of the elevation metadyne (c) To introduce stabilizing networks to prevent "hunting" (d) To limit automatically the value of its D.C. output so that the elevation motor torque is reduced when the gun reaches mechanical stops Input voltage: 80V. at 1,920 c/s. O/A. dim. 10.9/32 long x 8.3/4 high x 4.15/16 in. wide weight:- 81bs. 12ozs.	

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Cat. No.	Item name or designation	Item description or detail	I.S.P.L. code No.
Z6/ZF/FV 169253	AMPLIFIER, Gun control, elevation - continued No. 1, Mk. 3	Similar to Z6/ZF/FV 128431. Provision is made in this unit to apply the signal from the commander's elevation controller, to the secondary windings of the input grid transformer O/A. dim. 10.9/32 long x 8.3/4 high x 4.15/16 in. wide Identical with Z6/ZF/FV 169253 except that this item is fitted with cast aluminium chassis. Weight reduced to 6 lb.	11937, 12115
Z6/ZF/FV 178353	No. 1, Mk. 3/1	A three stage, 6 valve D.C. amplifier, plus one additional valve, used only in the stabilized condition of the equipment. Its main function is to variate the auxiliary variator winding of the metadyne output, thus slowing or speeding the elevation drive motor	11937, 12115
Z6/ZF/FV 180142	No. 2, Mk. 1	Working voltages:- Input 312 V., D.C. 260 V., D.C. Supply voltage:- 115V., A.C., 400 c/s.	12626 pt. 2
Z6/ZF/FV 128432	AMPLIFIER, Gun control, traverse No. 1, Mk. 1	A three stage, 4 valve amplifier its main functions being:- (a) To allow the A.C. voltage applied to the amplifier input to control its D.C. output currents to determine the speed and direction of movement of the turret (b) To amplify the A.C. input so that its amplifier D.C. output currents are sufficient to excite the control windings of the traverse metadyne generator (c) To provide a convenient stage in the servo system where by D.C. feed back voltages can be applied to prevent "hunting" and so improve its overall performance during stabilized control Input voltage: 80V., A.C., 1,920 c/s. O/A. dim.:- 10.1/8 long x 8.3/4 high x 4.15/16 in. wide Weight:- 6 lbs.	11937, 12115
Z6/ZF/FV 178348	No. 1, Mk. 1/1	Identical with Z6/ZF/FV 128432 but prefabricated chassis replaced with a cast aluminium chassis	11937, 12115
Z6/ZF/FV 180140	No. 2, Mk. 1	A four stage 7 valve D.C. amplifier. The main function of the output of the amplifier, is to variate the main turret variator windings of the metadyne, thus controlling the output of the main turret metadyne so controlling the speed and direction of the main turret	12626 pt. 2

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Cat. No.	Item name or designation	Item description or detail	I.S.P.L. code No.
Z6/ZF/FV 180141	AMPLIFIER, Gun control, traverse - continued No. 2, Mk. 2	continued detail for Cat. No. Z6/ZF/FV 180140 Working voltages:- Input 312V., D.C. 260V., D.C. Supply voltage:- 115V., A.C., 400 c/s. O/A. dim. 10.1/2 long x 12.1/16 high x 5.1/16 in. wide A three stage 6 valve D.C. amplifier, with 1 extra valve for use in line-up conditions only output of amplifier is used to variate the control turret metadyne variator windings, controlling speed and direction of movement of control turret Working voltages:- Input 312V., D.C. 260V., D.C. Supply voltage:- 115V., A.C., 400c/s. O/A. dim:- 13.1/4 long x 12.1/8 high x 5.1/16 in. wide	12626 pt. 2
Z6/ZF/FV 179678	No. 2 Mk. 3	Identical with Z6/ZF/FV 180141, but the germanium diode assy. deleted	12626 pt. 2
Z6/ZF/FV 179679	No. 2 Mk. 4	Identical with Z6/ZF/FV 180140, but the Speed grading circuit has been deleted	12626 pt. 2
Z6/ZF/FV 180139	AMPLIFIER, Gun control, velocity No. 1, Mk. 1	Consists of a main frame, bearing 2 blower motors with their associated circuits, housing 3 complete plug-in amplifier units. Each amplifier unit is a 4 valve R.C. coupled amplifier, having an input stage, a paraphrase phase-splitter and a push-pull output stage. The values of components in the amplifier are so chosen that a phase shift of 90 deg. occurs at 400 c/s. Supply voltages:- 295V., D.C. 260V., D.C. 23V., D.C. 6.3V., A.C. Signal voltages are derived from 115V., 400 c/s. supply O/A. dim:- 7.1/2 long x 11.1/8 high x 18.13/16 in. wide	12626 pt. 2
Z6/5340-99-915-7347	BUMPER, RUBBER	Synthetic rubber, 3/4 dia. x 7/16 in. high, used on Field Test equipment	
Z6/1290-99-200-9655	CONTROL MONITER, NO. 1, MK. 3	This unit provides facilities for testing and "setting up" the complete fire control electronic equipment. It has provision for external test supply voltages. Testing and "setting up" procedures are carried out by switched circuits within the unit visual indications of test and "setting up" voltages and currents, are "read of" on two micro-ammefers	

SECTION Z6

Cat. No.	Item name or designation	Item description or detail	I.S.P.L. code No.
Z6/1290-99-200-5774	CONTROL MONITER, NO. 1, MK. 3 - continued	continued detail Cat. No. Z6/1290-99-200-9655 Electrical data Power Supplies:- - 300V., D.C. + 300V., D.C. 28V., D.C. 300V., A.C. 400 c/s. 115V., A.C. 3 phase 400 c/s. O/A. dim. 12.35 long x 8.855 high x 5.16 in. wide	13929
Z6/6110-99-200-9622	CONTROL, MOTOR Starting Contractor, No. C, Mk. 1. CONTROL, MOTOR-GENERATOR Metadyne, No. 2, Mk. 3	For use on Cent. Mk. 5 AVRE This unit starts and controls both elevation and traverse metadynes. All components are enclosed within a cast aluminium alloy box. Contained in the box are the elevation and traverse "run" relays (2), elevation and traverse "start" relays (2) elevation and traverse "run" contractors and	13929

Z6/ZF/FV 128469

CONTROL PANEL
No. 1, Mk. 1

elevation and traverse "start" contractors
Also there is a meter shunt
Electrical data:-
28V., D.C. main supply (input)
28V., D.C. supply to Control Cubicle (output)
O/A. dim.:-
15.01 max. height x 12.4 max. width x 6.22 in. max. depth

Consists of the following

- (a) Control Cubicle, No. 1, Mk. 1
- (b) Amplifier, Gun Control, Traverse, No. 1 Mk. 1
- (c) Amplifier, Gun Control, Elevation, No. 1, Mk. 1
- (d) Power Pack, Gun Control, No. 1 Mk. 1 or Mk. 1/1
- (e) Junction and Control Unit, No. 1, Mk. 1

O/A. dim.:-

25.1/2 long x 18 high x 11 in. wide

Dim. between mounting centres:-

17.3/4 long x 6.1/2 in. wide

Weight:- 148 lbs.

Consists of the following:-

- (a) Control Cubicle, No. 1, Mk. 3
- (b) Amplifier, Gun Control, Traverse, No. 1, Mk. 1 or Mk. 1/1
- (c) Amplifier, Gun Control, Elevation, No. 1, Mk. 3
- (d) Power Pack, Gun Control, No. 1 Mk. 1/1 or Mk. 1/2
- (e) Junction and Control Unit, No. 1, Mk. 3

O/A. dim.:-

25.1/2 long x 18 high x 6.1/2 in. wide

Weight:- 148 lbs.

Z6/ZF/FV 169261

No. 1, Mk. 3

11937, 12115

SECTION Z6

Cat. No.	Item name or designation	Item description or detail	I.S.P.L. code No.
Z6/ZF/FV 179619	CONTROL UNIT, Gun control No. 1, Mk. 2	Used to provide misalignment voltages in conjunction with the output voltages of the control synchro transmitters for the traverse, elevation and velocity amplifiers	12626 pt. 2
Z6/ZF/FV 319026	No. 1, Mk. 4	This unit consists of 3 velocity servo-control units with associated square-rooting circuit, and real and quadrature voltage balancing circuits Identical in operation as Z6/ZF/FV 179619 but with a mechanically improved A.C. machine unit	12626 pt. 2
Z6/1290-99-200-9494	CONTROLLER, DUPLEX Elevation-traverse, No. 1, Mk. 4	Used by Commander and Gunner, the operation determines the speed and direction of gun/turret in elevation and traverse by a sensitive switching system, also contains 2 synchros, with associated gearing which supply signal voltages to operate and control elevation and traverse amplifiers electrical connection is made through a 19 pin electrical plug, a 3 pin electrical plug with protective cap. O/A. dim. 9.750 long x 6.480 in. wide	

Z6/ZF/FV 128696	DEPRESSION STOP AND LIMIT SWITCH No. 1, Mk. 2	Consists of a switch and its associated operating mechanism. The switch operates and prevents possible damage to the traversing or elevating gears when:- (a) The turret is traversed towards the rear of the tank (b) The gun is depressed 1 in. above the depression rail O.A. dim.:- 3.1/2 long x 3.1/16 high x 3 in. wide Weight:- 2 lbs. 4 ozs.	11937, 12115
Z6/1290-99-201-0767	GYROSCOPE ASSEMBLY, RATE No. 2, Mk. 1	Used on Chieftain combat	
Z6/ZF/FV 128450	JUNCTION AND CONTROL UNIT No. 1, Mk. 1	<i>This unit houses the metadyne and alternator starting contactors, also the measuring unit to enable personnel to "set up" the equipment, to ascertain whether or not, certain units of the equipment are functioning correctly.</i> O/A. dim.:- 17.1/4 high x 13.3/8 deep x 9.1/2 in. wide Weight:- 51 lbs.	

SECTION Z6

Cat. No.	Item name of designation	Item description or detail	I.S.P.L. code No.
Z6/ZF/FV 169255	JUNCTION AND CONTROL UNIT - continued No. 1, Mk. 3	This unit is identical with Z6/ZF/FV 128450 except it has additional wiring necessary for the introduction of the commander's elevation controller	11937, 12115
Z6/ZF/FV 180137	JUNCTION AND EMERGENCY CONTROL UNIT No. 1, Mk. 1	The primary function of this unit is as a junction panel for gun control equipment inter - connecting cables Also in this unit are:- (a) Emergency relays (b) Stabilized change-over relay (c) Current limiter (d) Test shunts (e) Reverse current rectifiers (f) Emergency change-over switch O/A. dim:- 28.1/2 long x 18 high x 20 in. wide	12626 pt. 1
Z6/ZF/FV 179620	No. 1, Mk. 2	This unit is identical with Z6/ZF/FV 180137, except for re-orientation of Unitor plugs and sockets	12626 pt. 2

Z6/ZF/FV 318997	No. 1, Mk. 6	This unit is identical with No. 1 Mk. 3, but provision has been made for the power feed to the Ventilating fan, No. 3 Mk. 1, centre baffle has been removed	12626 pt. 2
Z6/ZF/FV 319068	No. 1 Mk. 7	This unit is identical with No. 1 Mk. 6, except for re-orientation of Unitor plugs and sockets	12626 pt. 2
Z6/ZF/FV 180636	LIMIT SWITCH No. 1, Mk. 4	This switch is identical with the Depression stop and limit switch No. 1, Mk. 2, except for the addition of 1 extra plug, and only controls traversing motion	12626 pt. 2
Z6/ZF/FV 180136	No. 3, Mk. 1	This unit is used to control elevation motion of gun. It consists of 3 identical micro-switches and their associated operating mechanisms. The switches operate to control the rate of motion of the gun as follows:- (a) Elevation course (b) Elevation fine (c) Depression course O/A. dim:- 8 long x 3.1/8 high x 3 in. wide	12626 pt. 2
Z6/ZF/FV 318971	No. 5, Mk. 1	This unit is used in conjunction with the commander's traverse controller. Consists of 1 miniature micro-switch and its associated operating mechanisms. The micro-switch is operated by a spring loaded plunger O/A. dim:- 8.3/8 long x 2 high x 3 in. wide	12626 pt. 2

SECTION Z6

Cat. No.	Item name or designation	Item description or detail	I.S.P.L. code No.
Z6/ZF/FV 319065	LIMIT SWITCH - continued No. 7, Mk. 1	This unit is identical with Z6/ZF/FV 180136, except that elevation micro-switch has been replaced by a relay	12626 pt. 2
Z6/ZF/FV 179884	MAGSLIP RESETTER UNIT No. 1, Mk. 1	This unit supplies the signal voltages to the velocity amplifier and main and control turret traverse amplifiers. Contained in the unit are 2 magslips:- one 3 in. follow - through transmitter and one 1.1/2 in. coincidence transmitter. The magslips gear train and a magslip substitute transformer Input voltage:- 115V., A.C., 400 c/s. O/A. dim:- 8.15/16 long x 9.11/16 high x 4.1/8 in. wide	12626 pt. 2
Z6/ZF/FV 319004	No. 1, Mk. 2	This unit is identical with No. 1, Mk. 1 but has cam plate fitted to cover	12626 pt. 2
Z6/ZF/FV 180146	No. 2, Mk. 1	This unit supplies the signal voltages to the velocity amplifier and elevation amplifier. Contained in the unit are 2 identical magslips and their gear train Input voltage:- 115V., A.C., 400 c/s. O/A. dim:- 7.5/8 long x 9.5/16 high x 7.13/16 in. wide	12626 pt. 2
Z6/ZF/FV 179617	MAGSLIP TRANSMITTER UNIT No. 1, Mk. 2	This unit is identical with Z6/ZF/FV 179884, but with the addition of a germanium diode unit	12626 pt. 2
Z6/ZF/FV 180148	No. 4, Mk. 1	This unit is the commander's range transmitter contained in the unit is a 2 in. transmitter magslip and its associated drive gear Input voltage:- 115V., A.C., 400 c/s. O/A. dim:- 8.15/16 long x 9.11/16 high x 4.1/8 in. wide	12626 pt. 2
Z6/ZF/FV 179571	No. 4 Mk. 2	This unit is identical in function as Z6/ZF/FV 180148. Associated drive gear has been improved and action of spring reversed	12626 pt. 2
Z6/ZF/FV 318852	No. 5, Mk. 1/1	This unit is the commander's elevation control transmitter magslip. The signal voltage is fed to the commander's controller. The unit contains a 3 in. magslip and its associated gears Input voltage:- 115V., A.C., 400 c/s. O/A. dim:- 6.1/2 long x 6.1/8 high x 4.9/16 in. wide	12626 pt. 2

SECTION Z6

Cat. No.	Item name or designation	Item description or detail	I.S.P.L. Code No.
Z6/6125-99-201-0739	MOTOR-GENERATOR Metadyne, No. 5, Mk. 3	<p>A self-contained unit. With motor and metadyne windings on common armature shaft. Also mounted on armature shaft is a ventilating fan. Air is drawn in at metadyne commutator end and discharged at motor commutator end via a discharge duct. Its function is as a voltage/current amplifier, its input being supplied by the elevation or traverse electronic amplifiers and its output being fed to the elevation or traverse gearbox motors</p> <p>Electrical Ratings:- 26V. motor supply Metadyne output at 80mA. excitation:- 110A. to 130A. (Short circuited) 110V. to 130V. (Open circuited)</p> <p>Nominal speed:- between 7,250 and 8,000 rpm.</p> <p>Dim:- 17.475 long x 10.900 high x 8.400 in. wide Weight 98lb.</p>	

Z6/ZF/FV 128402

POWER PACK, Gun control
No. 1, Mk. 1

This unit consists of a prefabricated chassis on which are mounted:-

- (a) Transformer
- (b) Smoothing circuit
- (c) Rectifier valve
- (d) Blower motor
- (e) Measuring unit
- (f) Measuring unit L.T. transformer

This power pack supplies H.T. and L.T. to the amplifiers of FV/GCE, No. 1 Mks. 4,4/1 and 5 the amplifiers of FV/GCE, No. 1 Mks. 4,4/1 and 5

Input voltage:- 80V., A.C., 1,920 c/s.

O/A. dim:-

10.9/32 long x 10 high x 7 in. wide

Weight:- 17 lbs.

The principle differences between the Mk. 1 and Mk. 1/1 power packs, consist of a different mounting position for the blower motor and ventilating duct, and a change in the wiring of the unit

This unit is similar to the Z6/ZF/FV 178280, but differs slightly in the physical dim. of certain components

Z6/ZF/FV 178280

No. 1, Mk. 1/1

11937,
12115

Z6/ZF/FV 178350

No. 1, Mk. 1/2

11937,
12115

SECTION Z6

Cat. No.	Item name or designation	Item description or detail	I.S.P.L. Code No.
Z6/ZF/FV 180138	POWER PACK, Gun control - continued No. 2, Mk. 1	<p>This unit supplies power voltages to:-</p> <p>(a) 3 D.C. servo-amplifiers (b) 3 Velocity amplifier sub-chassis (c) Velocity amplifier gate valves</p> <p>Working Voltages:-</p> <p>(a) Input voltage:- 115., A.C., 400 c/s. (b) Output voltages:- (i) 300 V. positive with respect to earth (ii) 250 V. positive with respect to earth (iii) 30 V. negative with respect to earth</p> <p>O/A. dim:- 19.9/16 long x 11.1/8 high x 8.7/16 in. wide</p>	12626 pt. 2
Z6/ZF/FV 319007	No. 2, Mk. 3	<p>This unit is identical with No. 2 Mk. 1, except for re-orientation of Unitor plugs</p>	12626 pt. 2
Z6/1290-99-200-9593	POWER SUPPLY UNIT No. 1, Mk. 2	<p>This unit is the main power supply to the complete electronic system. Enclosed are two Motor-Generators:- one D.C. input and output one D.C. input, A.C. output</p>	13929

Z6/ZF/FV 180147

RANGE ADJUSTMENT MOTOR UNIT
No. 1, Mk. 1

Three power transformers.
The components, are enclosed in a cast aluminium alloy box

Electrical data:-
Input:- 28V., D.C.
Output:- 600V., D.C. centre tapped with respect to earth.
300V. D.C.
115V. 400 c/s. 3 phase
42.5V, 400 c/s. Synchro excitation
30V, 400 c/s. Synchro excitation
12.6V, A.C. heater supply

Dim:-
15.25 long x 13.27 high x 5.416 in. wide
used with FV/GCE No. 7, Mk. 4

Commander's Sight-range adjustment motor unit consists of a D.C. electric motor, 2 limit switches operating clockwise and anti-clockwise, and associated gearing

Normal working load:- 25 lbs. - ins.
Maximum working load:- 40 lbs. - ins.
Working Voltage:- 22-29V., D.C.
Weight:- 2 lbs 10 ozs
This unit is suppressed for radio interference

12626 pt. 2

SECTION Z6

Cat. No.	Item name or designation	Item description or detail	I.S.P.L. Code No.
Z6/ZF/FV 319025	RELAY AND JUNCTION PANEL Gun control, No. 1 Mk. 1	This unit is used as a junction between the main turret and control turret by way of the rotary-base junction. It consists of a prefabricated box containing 2 relays and a blower unit, with their circuits O/A. dim:- 6.15/16 long x 8.1/8 high x 3.7/16 in. wide	12626 pt. 2
Z6/1290-99-200-9661	RELAY ASSEMBLY Elevation, No. 1, Mk. 4	This unit provides the control-switching circuits, used to control the gun elevation and depression movements in both stabilized and non-stabilized conditions The components are contained in a prefabricated steel structure and consist of the following:- Elevation safety relay, stabilized and non-stabilized change over relay, elevation limit switch relays and elevation "maintain" relays, also one spare relay. O/A. dim. 12.35 long x 2.74 high x 4.59 in. wide	13929
Z6/1290-99-200-9656	Traverse, No. 1, Mk. 4	This unit provides the control - switching circuits, used to control the turret traverse movements, in both stabilized and non-stabilized conditions. The components are contained in a prefabricated steel structure, and consist of the following:- Traverse safety relay, stabilized and non-stabilized change over relay, lift relay, commander's over-ride relays and line-up relays, also one spare relay O/A. dim:- 12.35 long x 2.74 high x 4.59 in. wide	13929
Z6/ZF/FV 274051	SERVO-MOTOR No. 1, Mk. 1	The motor is the drive motor for the power elevation and traverse gear boxes. It is complete with built-in tacho - generator Normal ratings (a) Motor unit:- (i) Field voltage - 26V., D.C. (ii) Field current - 4.6A. (iii) Armature voltage - 48V., D.C. (iv) Armature current - 25A. (v) Speed - 1,250 r.p.m. (vi) Rated load - 1.25 h.p. (b) Tacho-generator unit :- (i) output - between 72.6V. and 73.2V. at 1,000 r.p.m. for both directions of rotation O/A. dim:- 17.5/32 long x 6.1/4 in. dia. 3/4 in. splined shaft, 1.9/16 in. long	12626 pt. 2

SECTION Z6

Cat. No.	Item name or designation	Item description or detail	I.S.P.L. code No.
Z6/6625-99-200-9565	SHUNT, INSTRUMENT	75MV, 100A. D.C. used on Tank, Combat, Chieftain	
Z6/1290-99-200-9487	SWITCHBOARD, FIRE CONTROL No. 6, Mk. 2, Unit TU	This unit, a cast aluminium box on which is mounted on/off master switch, rotary switch, light press switch, 4 push switches 2 on/off muffs switch. Provides operating facilities for traverse 2 elevation metadynes, electrical connection is made through a 21 pin electrical plug O/A. dim:- 12 long x 3.53 high x 2.75 in. wide	13929
Z6/1290-99-200-9564	No. 6, Mk. 3	This unit is an alternative to Z6/1290-99-200-9487 the master switch and travel warning light have been deleted	13929
Z6/5930-99-200-9562	SWITCH. BOX Master, No. 1, Mk. 1	This unit is used to switch on the complete equipment. It is fitted to the vehicle only when the SWITCHBOARD, FIRE CONTROL, No. 6, Mk. 3 is fitted	13929
Z6/ZF/FV 318908	SWITCH UNIT Gun control, No. 3, Mk. 1	This unit consists of a cast aluminium box plus cover, on which is mounted a single pole, single throw switch (bias "off") Mounted in box is a two-pole Plessey plug. Box is mounted on steel bracket O/A. dim:- 8.1/8 long x 3 5/8 high x 4 in. wide	12626 pt. 2

Z6/1290-99-200-9590	TRIMMING UNIT, NO. 2, MK. 3	This unit provides trimming facilities to the electronic system for both elevation and traverse movements. Also provided is a trimming network for the gyro unit. The variable resistors in the gyro trimming network are pre-set. The circuit and components are enclosed in an aluminium alloy box Electrical data Trim supply:- -6.3V-0- +6.3V. D.C. "Straight through" supply:- 115V. A.C., 3 phase, 400 c/s.gyro supply 0V., 30V., 42.5V., synchro excitation O/A. dim:- 7.993 max. length x 5.125 max.height x 4.720 in.wide	13929
Z6/ZF/FV 128605	TRIMMING AND SWITCH UNIT No. 1, Mk. 1	This unit consists of a cast aluminium box in which are mounted the gyro-isolation switch the gunner's elevation and traverse stabilized trimmers, alternator start/stop switch, metadyne on/off switch, stabilized and non-stabilized switch and gunner's non-stabilized trimmer O/A. dim:- 16 long x 5 high x 2.3/16 in. wide Weight:- 5 lbs.	11937, 12115

SECTION Z6

Cat. No.	Item name or designation	Item description or detail	I.S.P.L. code No.
Z6/ZF/FV 178489	TRIMMING AND SWITCH UNIT - continued No. 3, Mk. 1/1	This unit consists of a cast aluminium box in which are mounted the gyro-isolation switch, gunner's elevation and traverse stabilized trimmers, alternator start/stop switch, metadyne on/off switch, stabilized and non-stabilized change-over switch, gunner's non-stabilized traverse trimmer, stabilized change-over and commander's controller relays and blower unit O/A. dim:- 16.3/16 long x 6.7/16 high x 5 in. wide	11937
Z6/ZF/FV 179932	No. 4, Mk. 1	This unit consists of a cast aluminium box in which are mounted alternator stop/start switches, metadyne on/off switches and gunner's elevation trimming resistor. Also the switches operating mechanism O/A. dim:- 5.3/16 long x 5.1/4 high x 4.7/8 in. wide	12626 pt. 2

SECTION Z6

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RESTRICTED.