

CS

ARMoured CARS, DAIMLER, MKS. 1 AND 2

TECHNICAL HANDBOOK - MODIFICATION INSTRUCTION

SUMMARY

1. This instruction covers the fitting of Dischargers, smoke grenade to the turrets of vehicles designated by the General Staff.

Estimated time required to perform the modification: 10 man-hours.

2. Items affected:-

Turret and electrical equipment

3. Action required:-

(a) By units affected:-

- (i) When directed by the General Staff, enter the details of this modification in the A.B. 413 of each vehicle affected.
- (ii) Demand the stores and, on receipt, request R.E.M.E. to carry out this modification, ensuring that the stores accompany each vehicle into workshops.

(b) By second, third and fourth line R.E.M.E. workshop units (Group 'B'):-

- (i) When requested by units, carry out this modification in accordance with the instructions given in paras. 6 and 7 and Figs. 1, 2, 3 and 4.
- (ii) Endorse the modification details in the A.B. 413 of each vehicle modified.

4. Stores required: The following stores will be demanded through the normal channels, quoting the modification reference number A 2544 and E.M.E.R. Whd. Veh. H 257 Mod. Inst. No. 2 on the indent:-

Note: Stores will be demanded as a set and not by individual items.

(For stores, see over)

<u>V.A.O.S., Section</u>	<u>Part No.</u>	<u>Designation</u>	<u>Qty. per veh.</u>
LV5/BM	BT 432	Discharger, smoke grenade, mod. set comprising:	1
M1	MR 156 GA	Discharger, smoke grenade (L.H.) (1)	
M1	MR 157 GA	Discharger, smoke grenade (R.H.) (1)	
LV6/MT5	12294	Simmonds nuts, $\frac{3}{8}$ in. B.S.F. (12)	
LV6/MT5	FB 106/8D	Bolts, B.S.F. $\frac{3}{8}$ in. x 1 in. hex.-hd. (12)	
LV5/BM	131352	Support assy. (L.H.) (1)	
LV5/BM	131353	Support assy. (R.H.) (1)	
LV5/BM	416172/2	Conduit assy. (1)	
LV5/BM	416172/4	Conduit assy. (1)	
LV5/BM	C 6442	Bushes (4)	
LV1/NM	HC 4530	Adaptors (2)	
LV1/LD	BC 41080	Protectors (2)	
LV5/BM	299705	Blanking plate (1)	
LV6/MT5	FB 306/12D	Bolts, B.S.F., $\frac{3}{8}$ in. x $1\frac{1}{2}$ in., csk.-hd. (3)	
LV5/BM	416160	Pad assys. (2)	
LV5/BM	C 4192	Elbows (2)	
LV5/BM	CA 6562	Locknuts (2)	
LV5/BM	C 4272	Tee-pieces (2)	
LV5/BM	406392	Bowden clips (2)	
LV5/BM	415282	Clips (3)	
LV5/BM	416332	Clip (1)	
LV5/BM	416173/7	Conduit assy. (1)	
LV5/BM	416173/5	Conduit assy. (1)	
LV5/BM	416172/3	Conduit assy. (1)	
LV5/BM	416173/6	Conduit assy. (1)	
M1	LDN 10934	Button box (1)	
LV5/BM	299673	Button box support (1)	
LV6/MT5	FB 104/4D	Bolts, B.S.F., $\frac{1}{4}$ in. x $\frac{1}{2}$ in., hex.-hd. (4)	
LV6/MT5	34974	Simmonds nuts, $\frac{1}{4}$ in. B.S.F. (4)	
LV6/MT4	11344	Cable, flame and oil resisting (14/012 I.A.E. Spec. 192 R.) (16 yd.)	
G2	GB 7160	Electrodes, austenitic, 10 S.W.G. (12 ft.)	

5. Stores to be removed:-

<u>Part No.</u>	<u>Designation</u>	<u>Qty. per veh.</u>
129438	Cables, No. 8	2
29560	Bracket, firing lever	1
0117	Firing levers	2
3074	Dischargers, smoke grenade, 4 in.	2
129438	Bracket, Discharger, smoke grenade	1

DETAIL

6. In order that a defensive smoke screen may be laid rapidly in an emergency, Dischargers, smoke grenade, No. 1, Mk. 1 (R.H. and L.H.) and ancillary equipment will be fitted to the vehicle turret.

7. Proceed as follows:-

- (a) Refer to Fig. 1. Remove and discard the two 4 in. smoke dischargers and mounting bracket from the offside turret panel, and secure the blanking plate (Pt. No. 299705) to the turret rear side plate, using the three bolts of the Thompson sub-machine gun ammunition container and the three additional bolts (Pt. No. FB 306/12D) provided. Weld the blanking plate to the turret as shown, using the electrodes provided.
- (b) Refer to Fig. 3. Remove and discard the firing levers, cables and support bracket from the inside of the turret. Replace the support bracket securing bolts in the turret ring.
- (c) Refer to Figs 2 and 3:-
  - (i) Mark out from the dimensions shown, and drill or flame cut the two  $\frac{7}{8}$  in. dia. holes.
  - (ii) Weld a protector (Pt. No. EC 41080) over each hole on the outside of the turret as shown.
- (d) Refer to Fig. 2:-
  - (i) Locate and weld the support assemblies L.H. and R.H. (Pt. Nos. 131352 and 131353) on the turret side panels.
  - (ii) Secure the smoke dischargers, L.H. and R.H. (Pt. Nos. MR 156GA and MR 157GA) to their respective supports, using the nuts and bolts provided.
- (e) Refer to Fig. 3:-
  - (i) Locate and weld the two pad assemblies (Pt. No. 416160) to the inside of the turret side panels.
  - (ii) Bolt the button box support (Pt. No. 299673) to the turret top plate and secure the button box (Pt. No. LDN 10934), using the four bolts and nuts provided.
- (f) Refer to Figs. 2 and 3. Assemble the six conduit assemblies, using the elbows, tee-pieces, bushes, adaptors and locknuts provided and secure the assemblies to the turret panels in the positions indicated, using the clips provided.
- (g) Refer to Fig. 4:-
  - (i) With the battery master switch in the OFF position, wire up and complete the connections to the smoke dischargers, button box, and fusebox as shown.
  - (ii) Close the battery master switch and test the circuit for correct operation by connecting a vehicle inspection lamp between each discharger terminal and earth in turn and pressing the appropriate firing button. The lamp should glow only when the appropriate firing button is pressed.

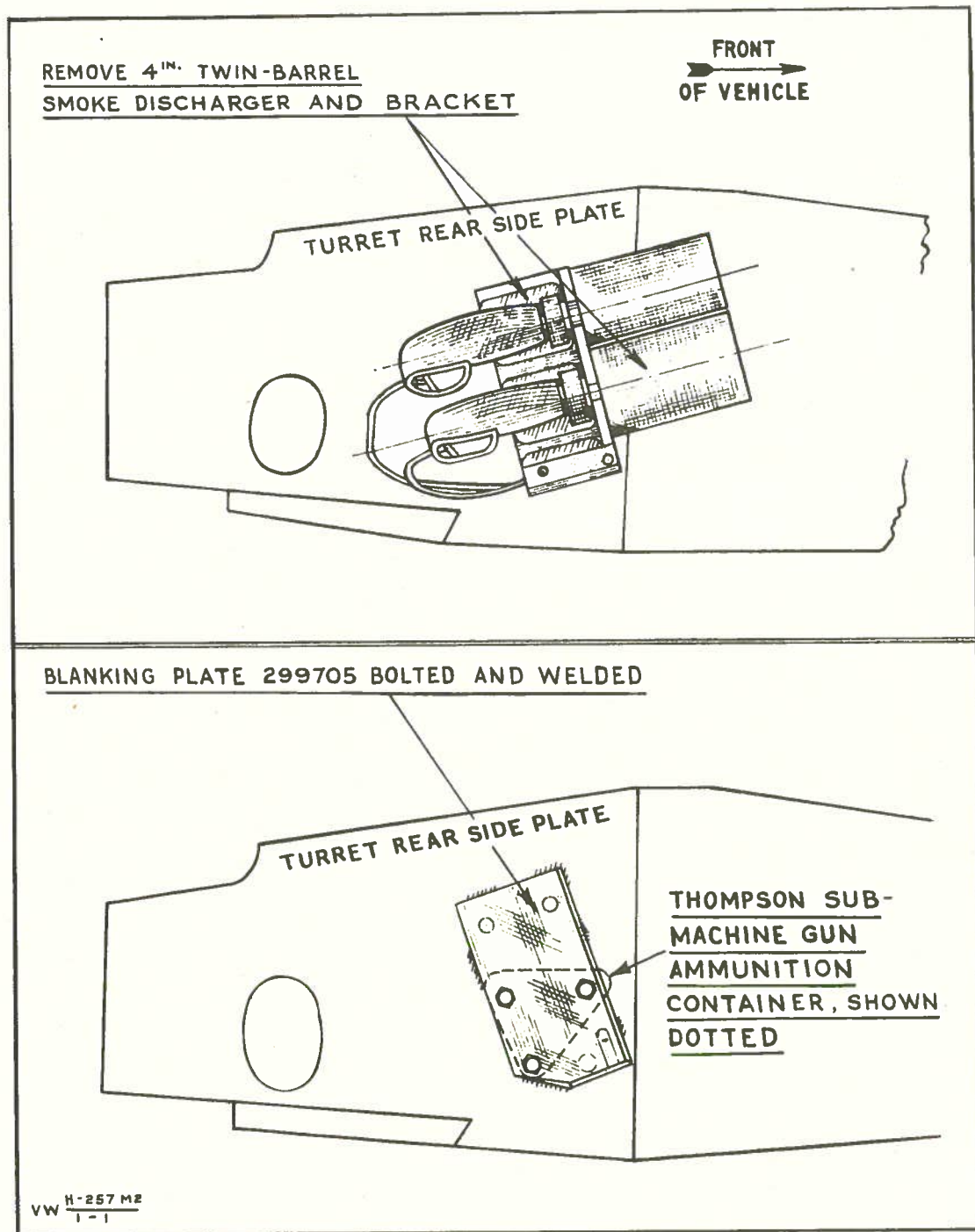


Fig. 1 - External view of turret, offside



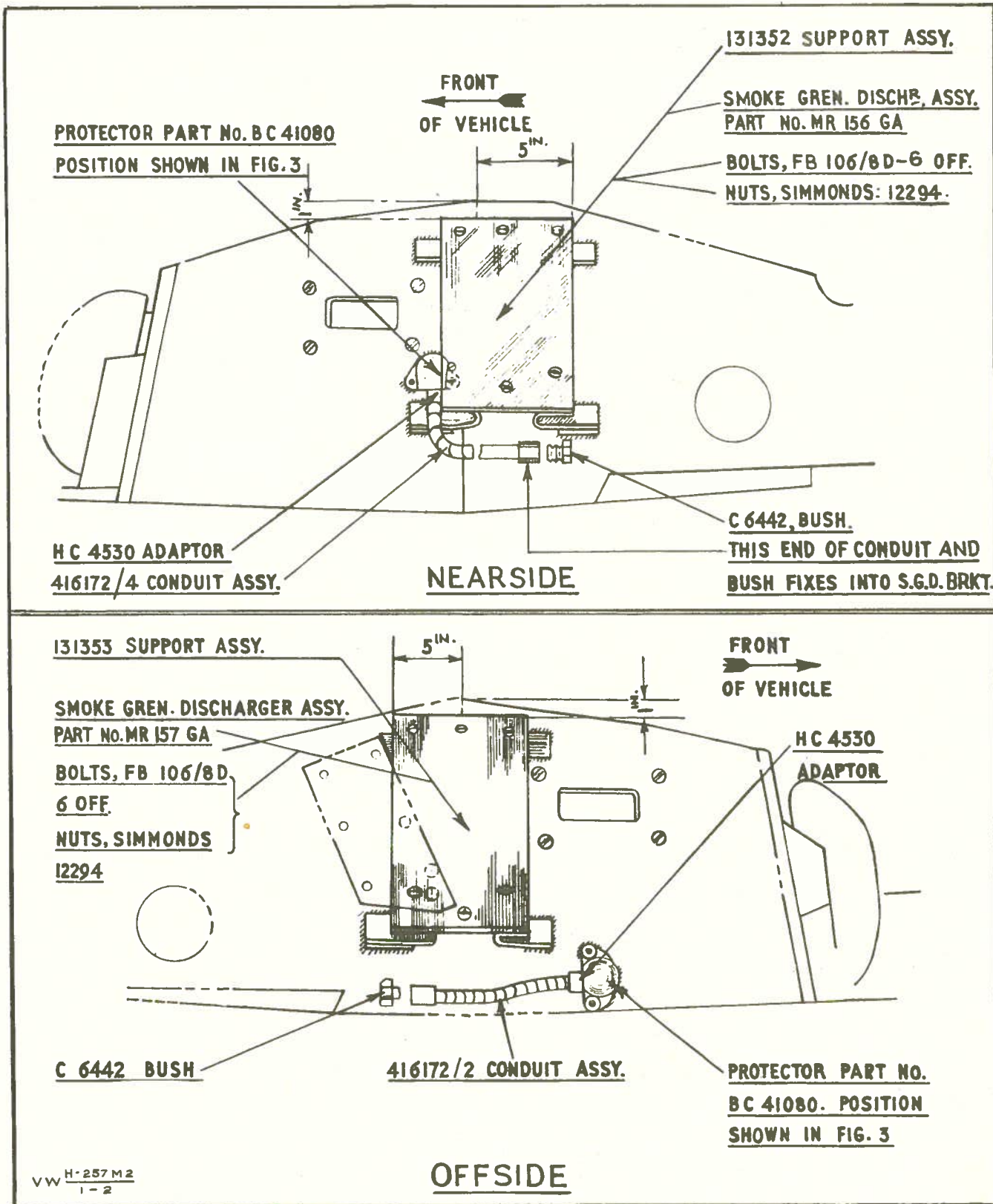


Fig. 2 - External views of turret, nearside and offside

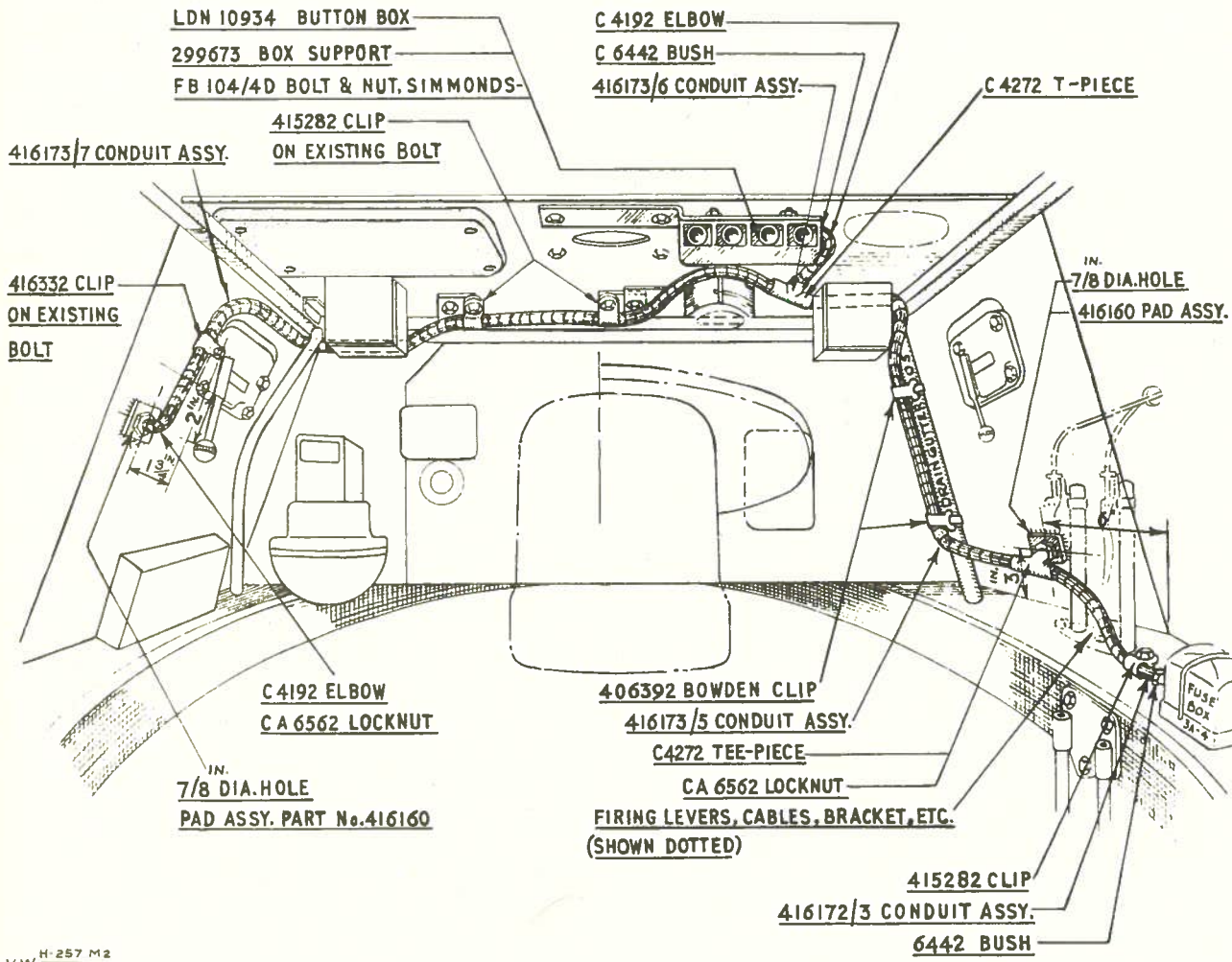


Fig. 3 - Interior view of turret, looking forward

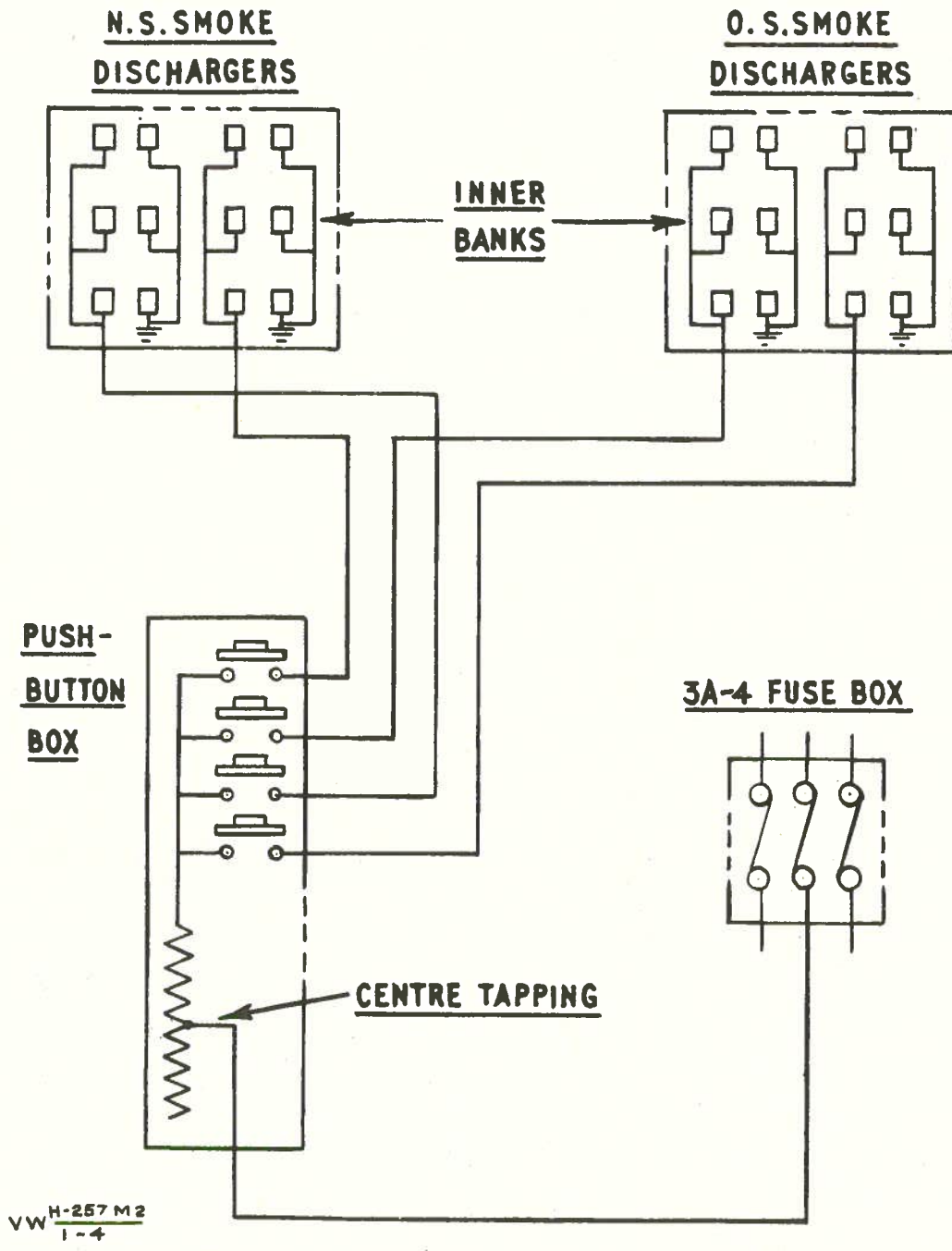


Fig. 4 - Wiring diagram

M.E. 7(d) 2119/9/4 (A2544)  
300/Mods./4068  
F.V.D.E. Approval No. 7179

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**RESTRICTED**