

A2. THE ORIGINAL FORD / ROVER CHASSIS (C1N001 - 006).

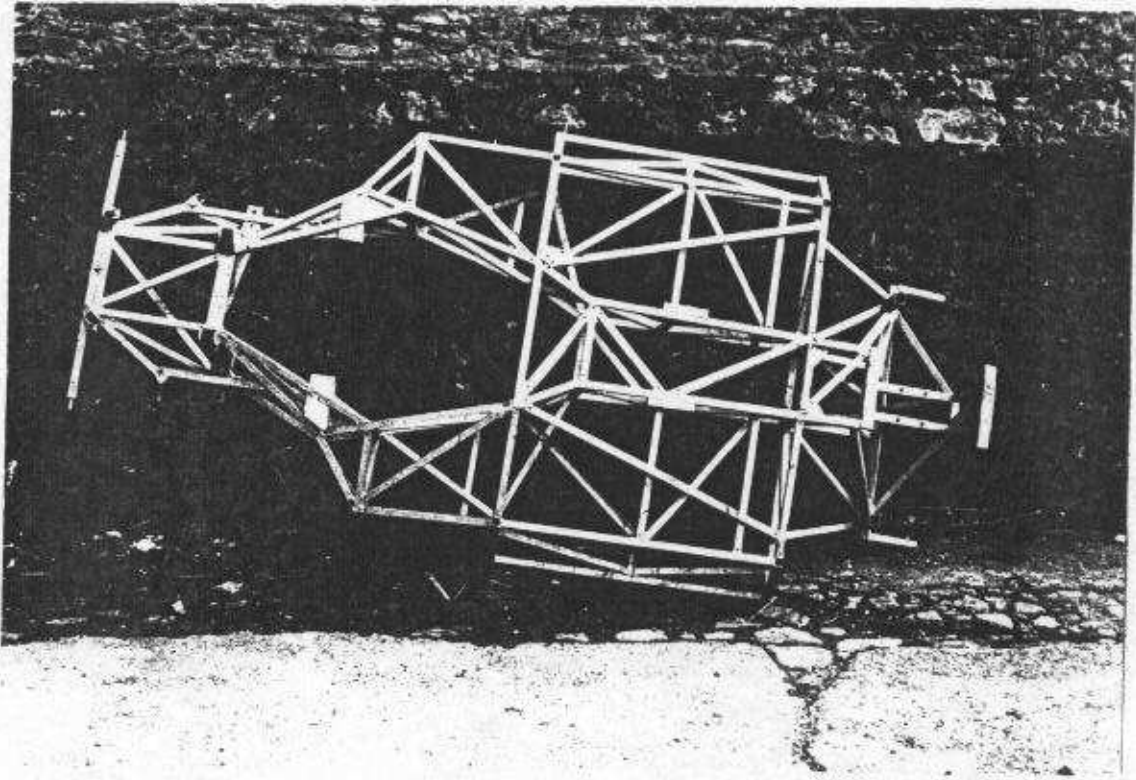


FIG A3 Mk2 Ford/Rover Chassis

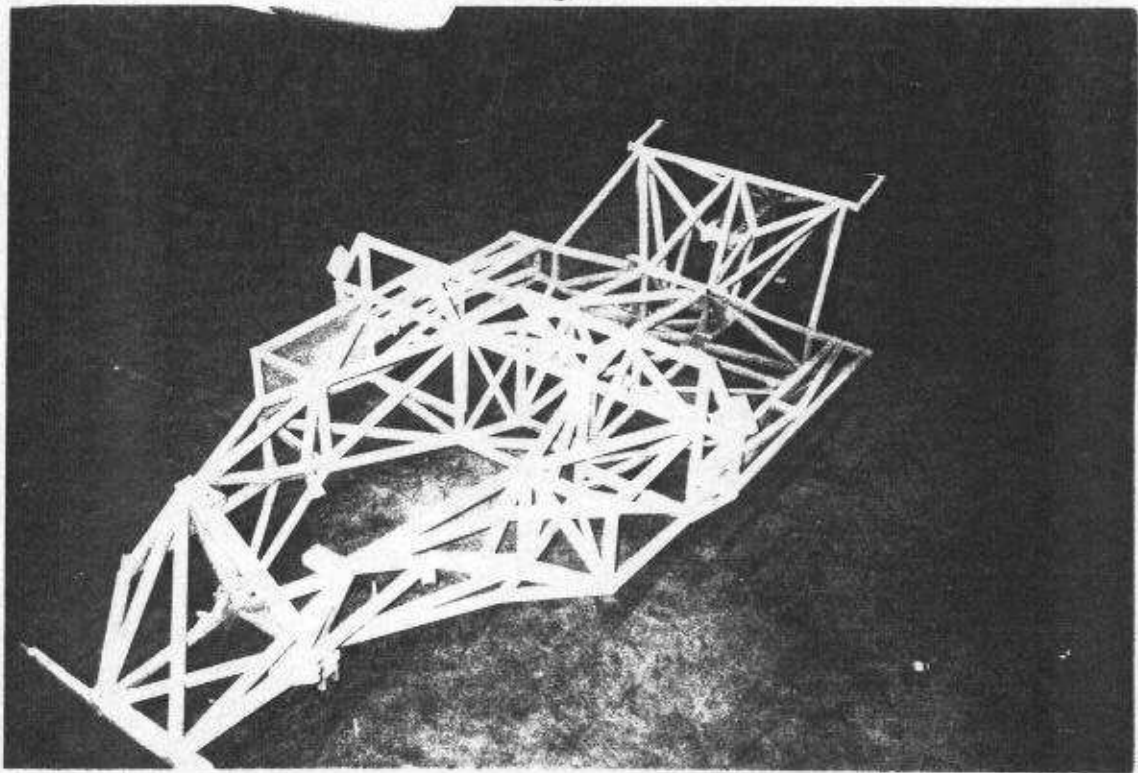


FIG A4 Austin Jaguar Chassis

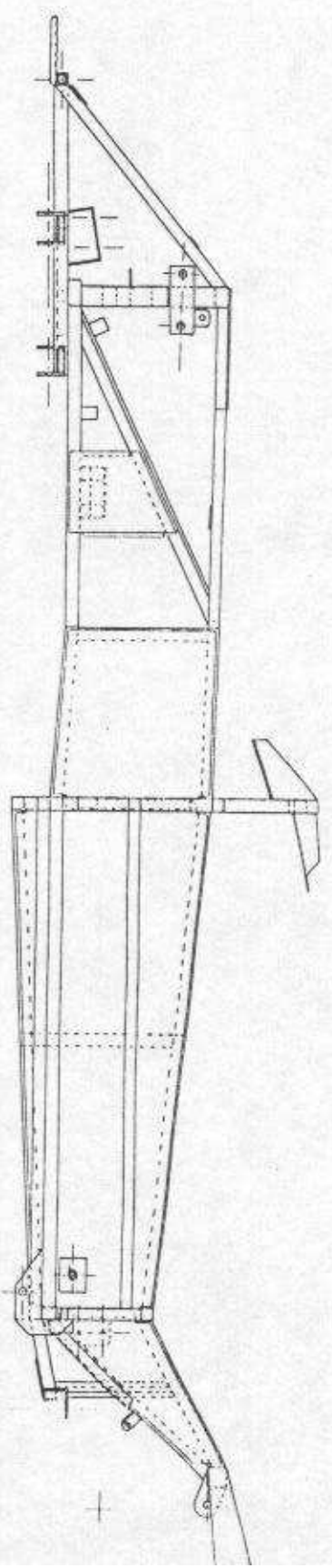
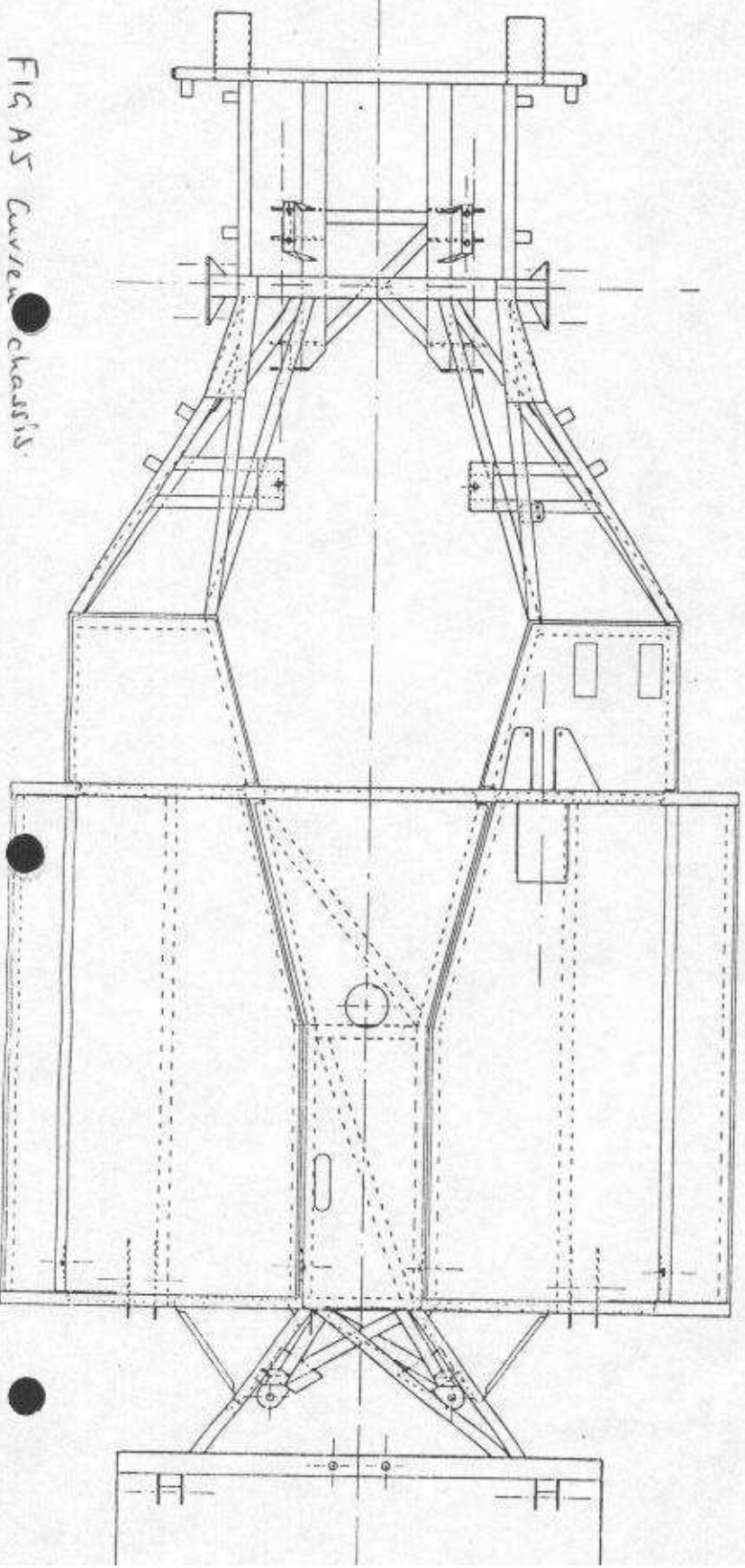
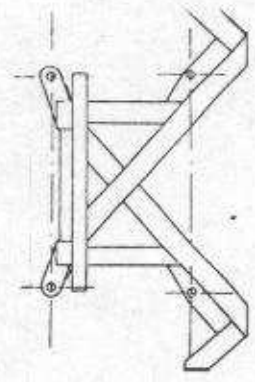
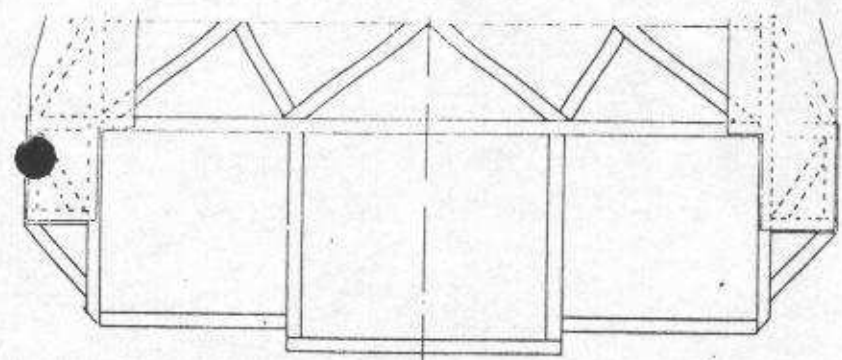


FIG A5 Cuvres chassis

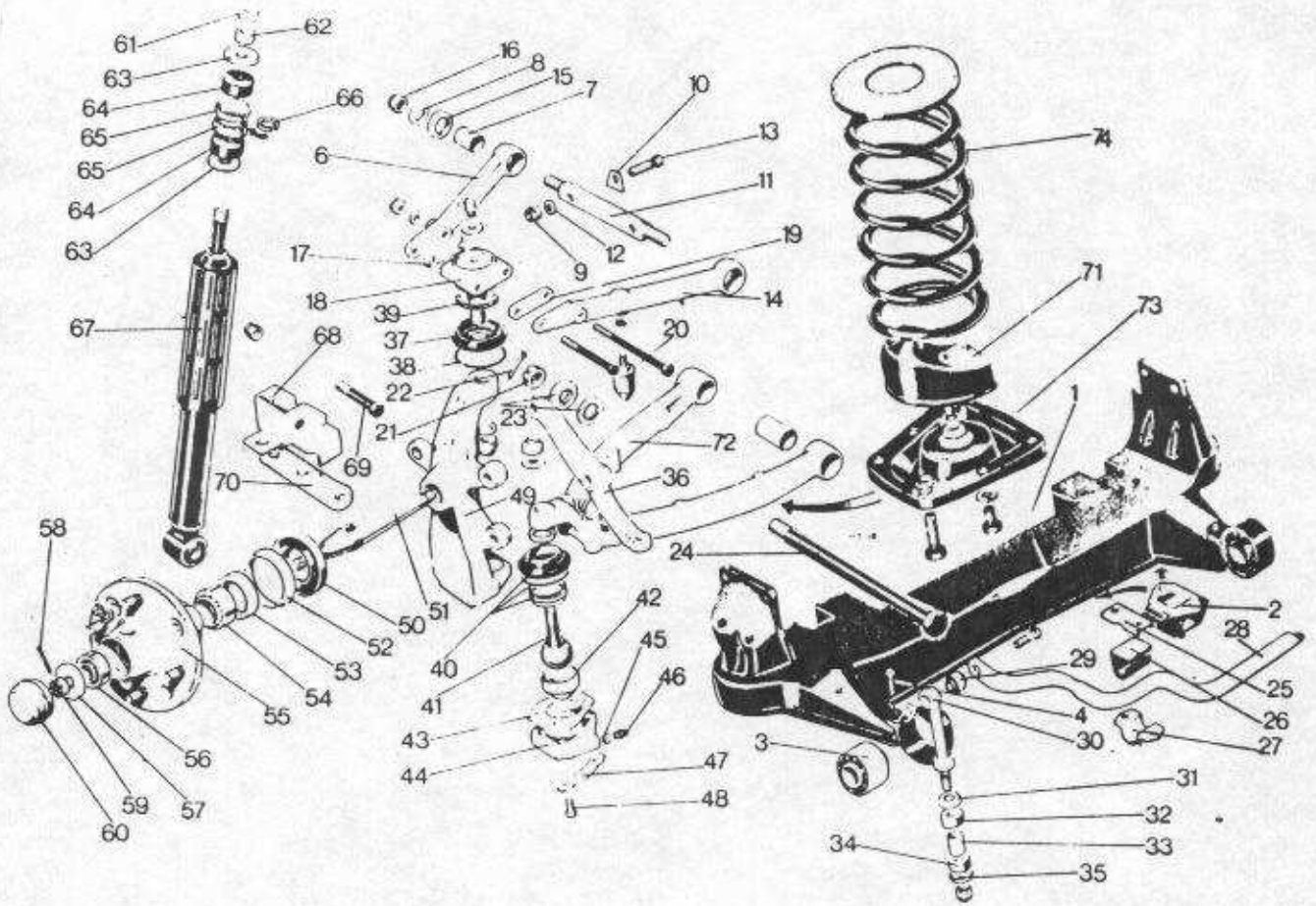
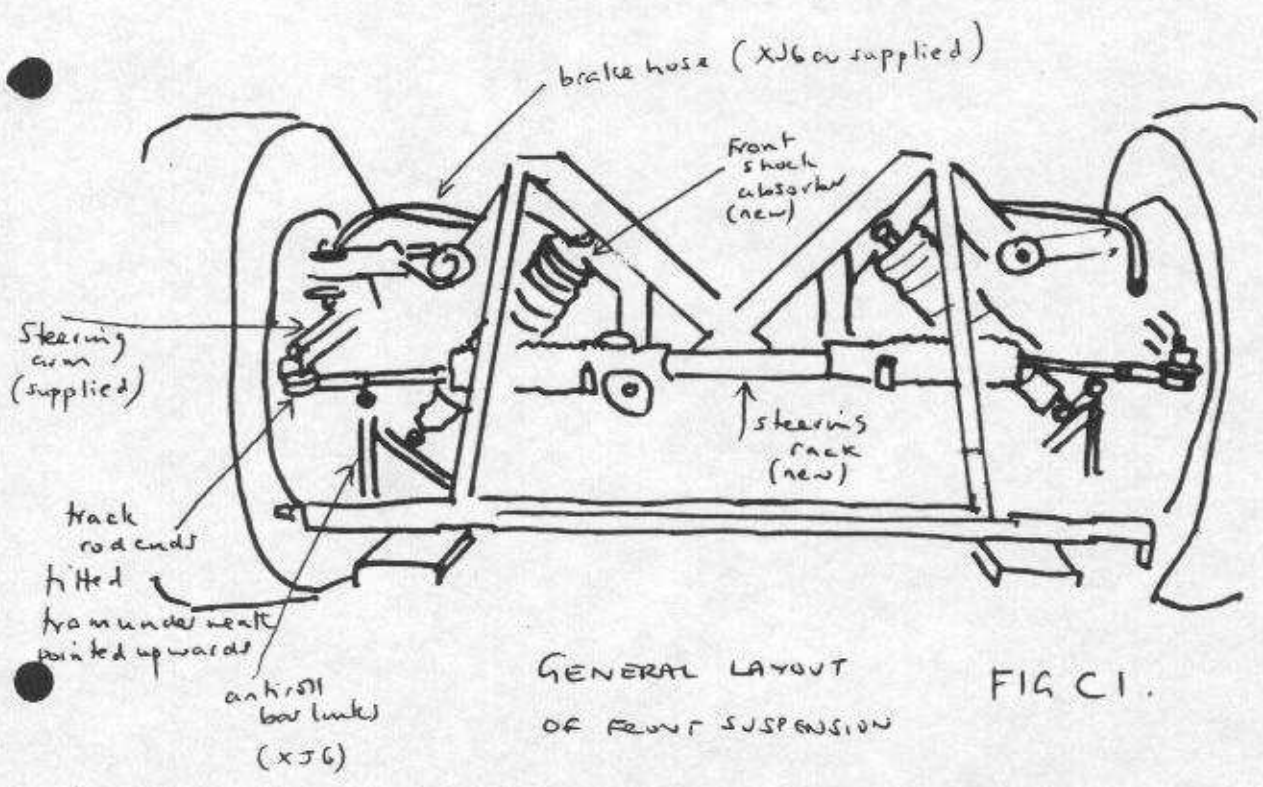
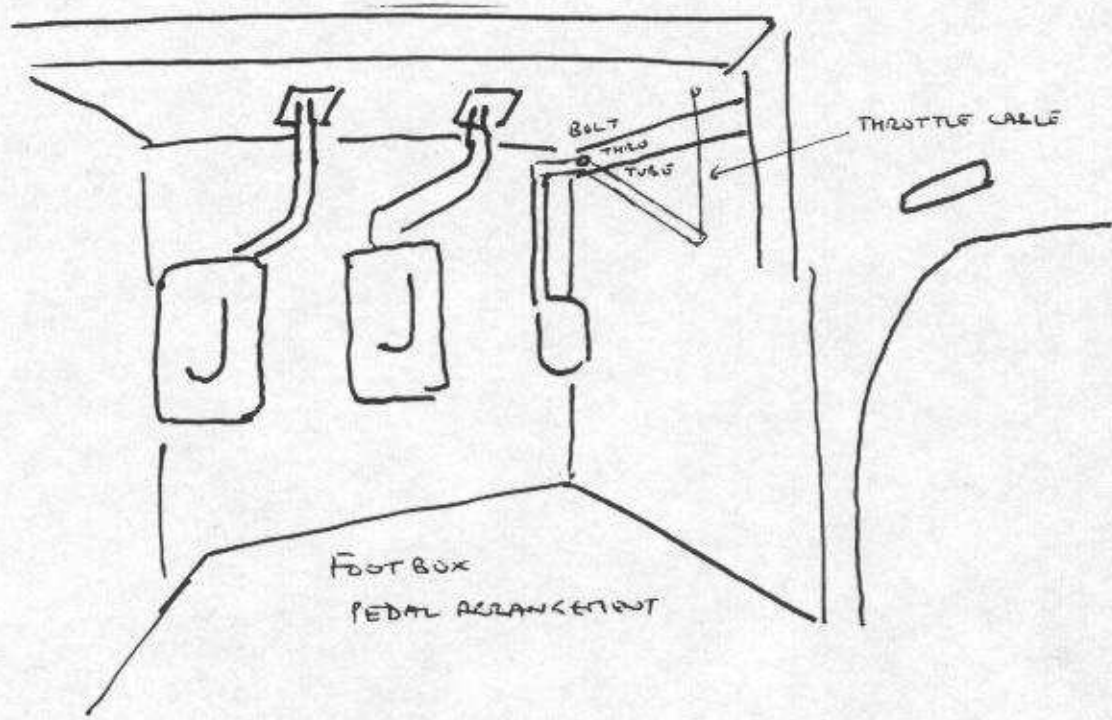


Fig. C I Exploded view of the front suspension

- | | | | |
|------------------------------|----------------------|------------------------|----------------------|
| 1 Crossmember | 20 Buffer | ✓ 39 Insert | ✓ 58 Split pin |
| 2 Flexible mounting | ✓ 21 Castellated nut | ✓ 40 Spigot | ✓ 59 Castellated nut |
| 3 Flexible bush | ✓ 22 Split pin | ✓ 41 Ballpin | ✓ 60 End cap |
| ✓ 4 Setscrew | ✓ 23 Washer | ✓ 42 Ball socket | 61 Locknut |
| ✓ 6 Upper wishbone arm | ✓ 24 Pivot shaft | ✓ 43 Shims | 62 Nut |
| ✓ 7 Bush | ✓ 25 Keeper plate | ✓ 44 Cap | 63 Washer |
| ✓ 8 Washer | ✓ 26 Flexible bush | ✓ 45 Washer | 64 Cushion |
| ✓ 9 Self-locking nut | ✓ 27 Clamp | ✓ 46 Nipple | 65 Cup washers |
| ✓ 10 Shim (camber adjusting) | ✓ 28 Anti-roll bar | ✓ 47 Lockplate | 66 Spacer |
| ✓ 11 Pivot shaft | ✓ 29 Flexible bush | ✓ 48 Bolt | 67 Shock absorber |
| ✓ 12 Washer | ✓ 30 Link | ✓ 49 Stub axle carrier | 68 Bracket |
| ✓ 13 Bolt | ✓ 31 Washer | ✓ 50 Water deflector | 69 Bolt |
| ✓ 14 Upper wishbone arm | ✓ 32 Cushion | ✓ 51 Stub axle | ✓ 70 Bracket |
| ✓ 15 Washer | ✓ 33 Distance piece | ✓ 52 Oil seal | ✓ 71 Bump stop |
| ✓ 16 Self-locking nut | ✓ 34 Cushion | ✓ 53 Water deflector | ✓ 72 Lower wishbone |
| ✓ 17 Shim (caster adjusting) | ✓ 35 Washer | ✓ 54 Inner bearing | ✓ 73 Spring pan |
| ✓ 18 Upper balljoint | ✓ 36 Steering arm | ✓ 55 Front hub | 74 Spring |
| ✓ 19 Distance piece | ✓ 37 Dust excluder | ✓ 56 Outer bearing | |
| | ✓ 38 Retaining ring | ✓ 57 'D' washer | |

* PARTS REQUIRED FROM DONOR VEHICLE .

FIG C I



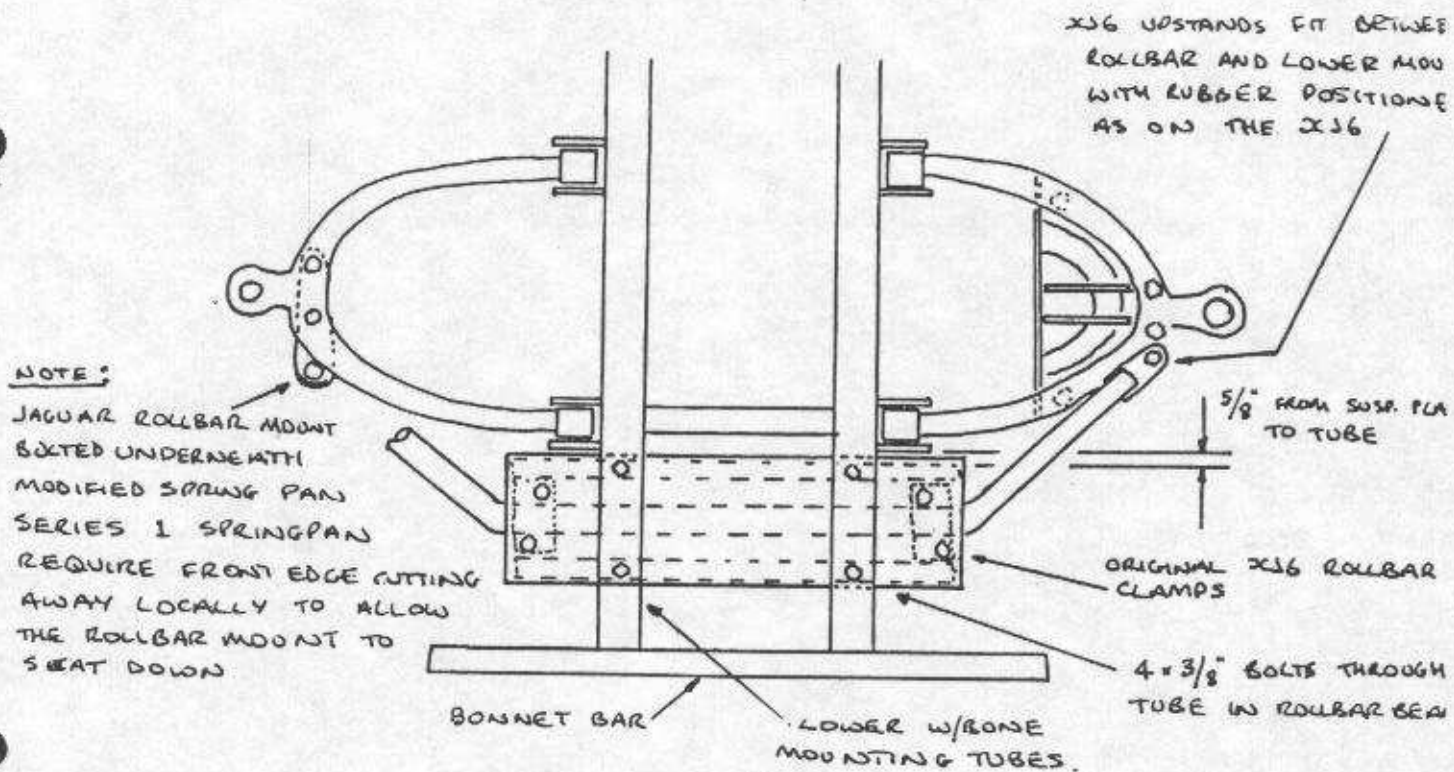


FIG C7 ROLLBAR INSTALLATION

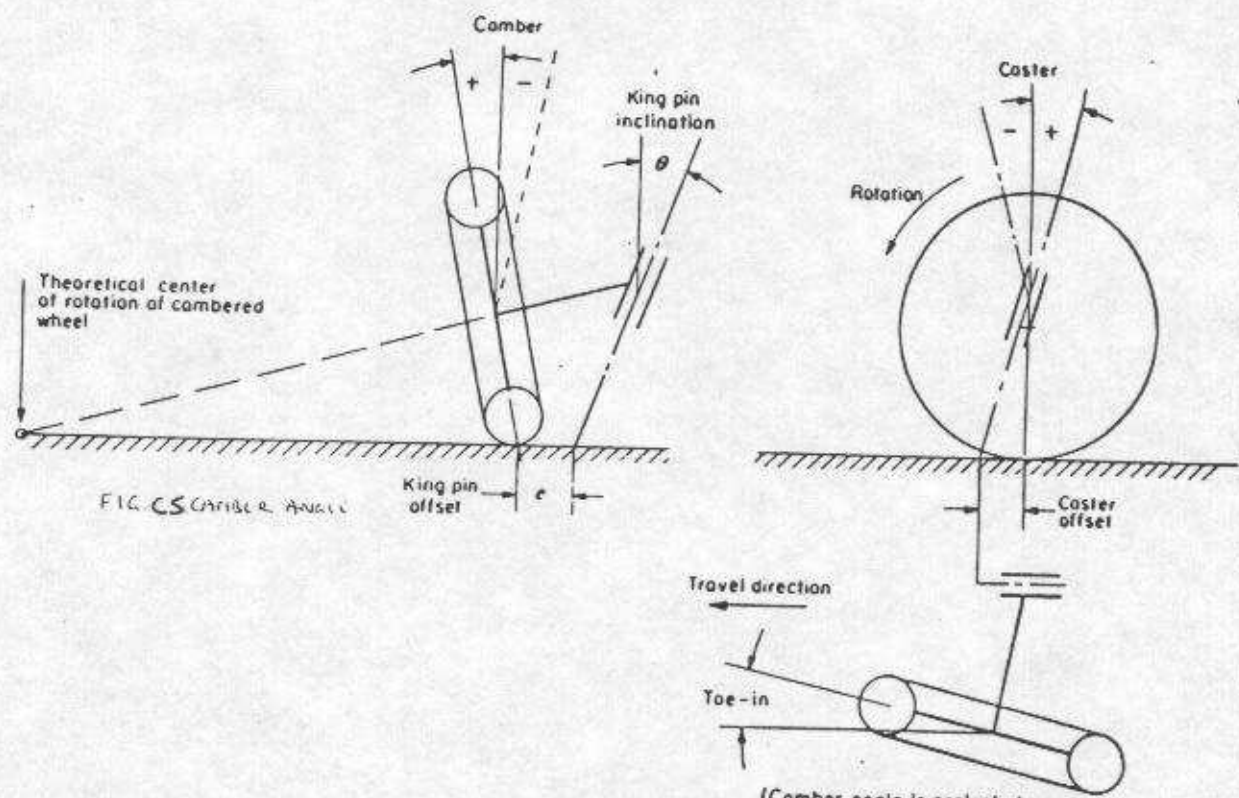


FIG C6 WHEEL ALIGNMENT

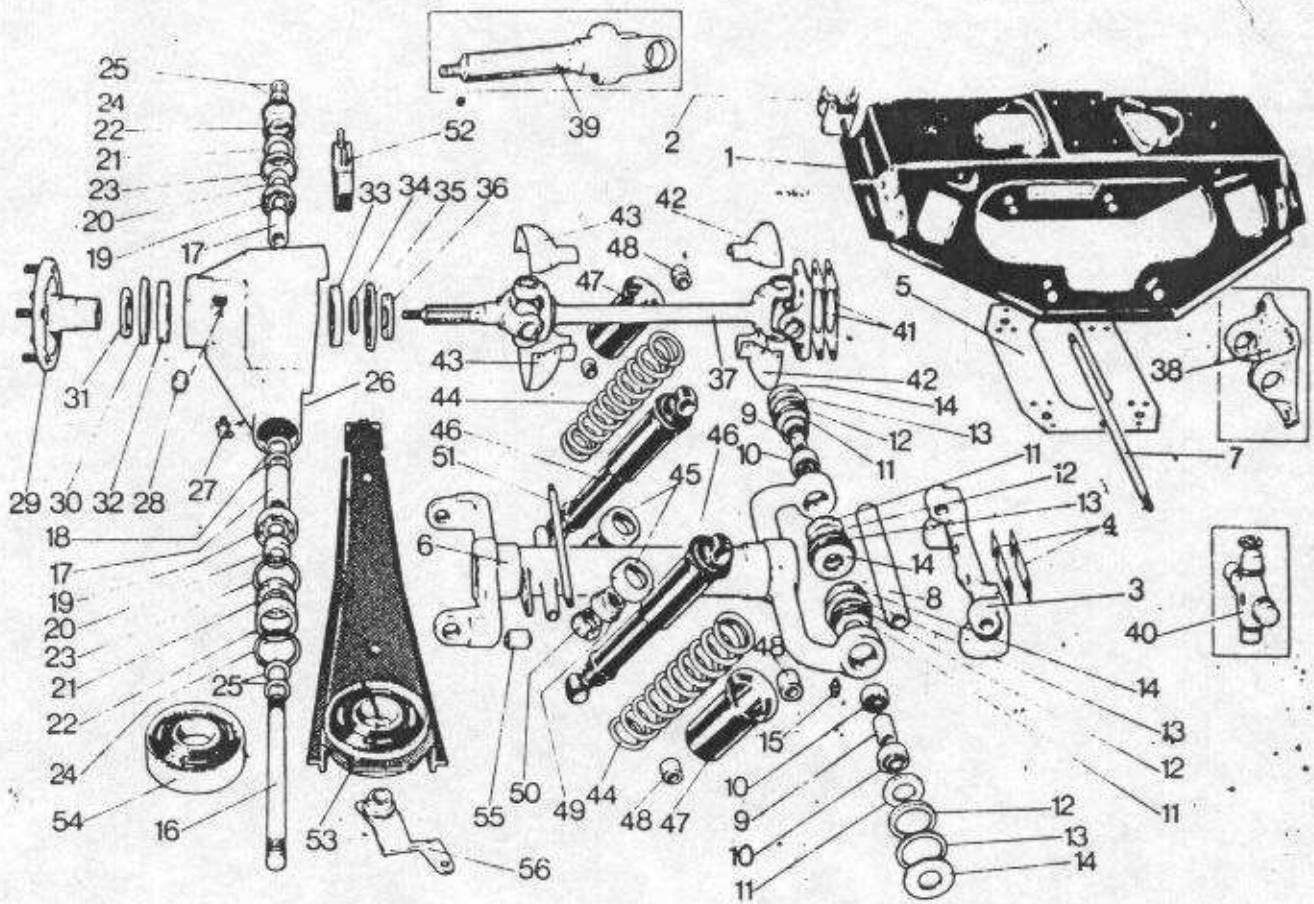


Fig. D1 Exploded view of the rear suspension

- | | | | |
|--------------------------|---------------------------|----------------------------|--|
| ✓ 1 Crossmember | ✓ 15 Grease nipple | ✓ 29 Hub | ✓ 43 Joint cover (outer) |
| ✓ 2 Flexible mounting | ✓ 16 Outer pivot shaft | ✓ 30 Outer oil seal | ✓ 44 Coil spring |
| ✓ 3 Inner pivot mounting | ✓ 17 Sleeve | ✓ 31 Ring | ✓ 45 Packing ring |
| ✓ 4 Shims | ✓ 18 Shim | ✓ 32 Outer bearing | ✓ 46 Shock absorber |
| ✓ 5 Bracing plate | ✓ 19 Bearing | ✓ 33 Inner bearing | ✓ 47 Dust shield |
| ✓ 6 Wishbone | ✓ 20 Ring | ✓ 34 Spacer | ✓ 48 Flexible bush |
| ✓ 7 Inner pivot shaft | ✓ 21 Oil seal | ✓ 35 Oil seal | ✓ 49 Seat |
| ✓ 8 Spacer tube | ✓ 22 Oil seal retainer | ✓ 36 Ring | ✓ 50 Retainer |
| ✓ 9 Spacer tube | ✓ 23 Spacer | ✓ 37 Driveshaft | ✓ 51 Shock absorber lower mounting shaft |
| ✓ 10 Needle bearing | ✓ 24 Washer | ✓ 38 Driveshaft flange | ✓ 52 Bump stop |
| ✓ 11 Thrust washer | ✓ 25 Shim | ✓ 39 Splined yoke | ✓ 53 Radius arm |
| ✓ 12 Seal | ✓ 26 Hub carrier | ✓ 40 Universal joint | ✓ 54 Flexible bush |
| ✓ 13 Retainer | ✓ 27 Grease nipple | ✓ 41 Shim (camber control) | ✓ 55 Flexible bush |
| ✓ 14 Thrust washer | ✓ 28 Grease retaining cap | ✓ 42 Joint cover (inner) | ✓ 56 Safety strap |

* Parts required from donor vehicle.

Fig D.1.

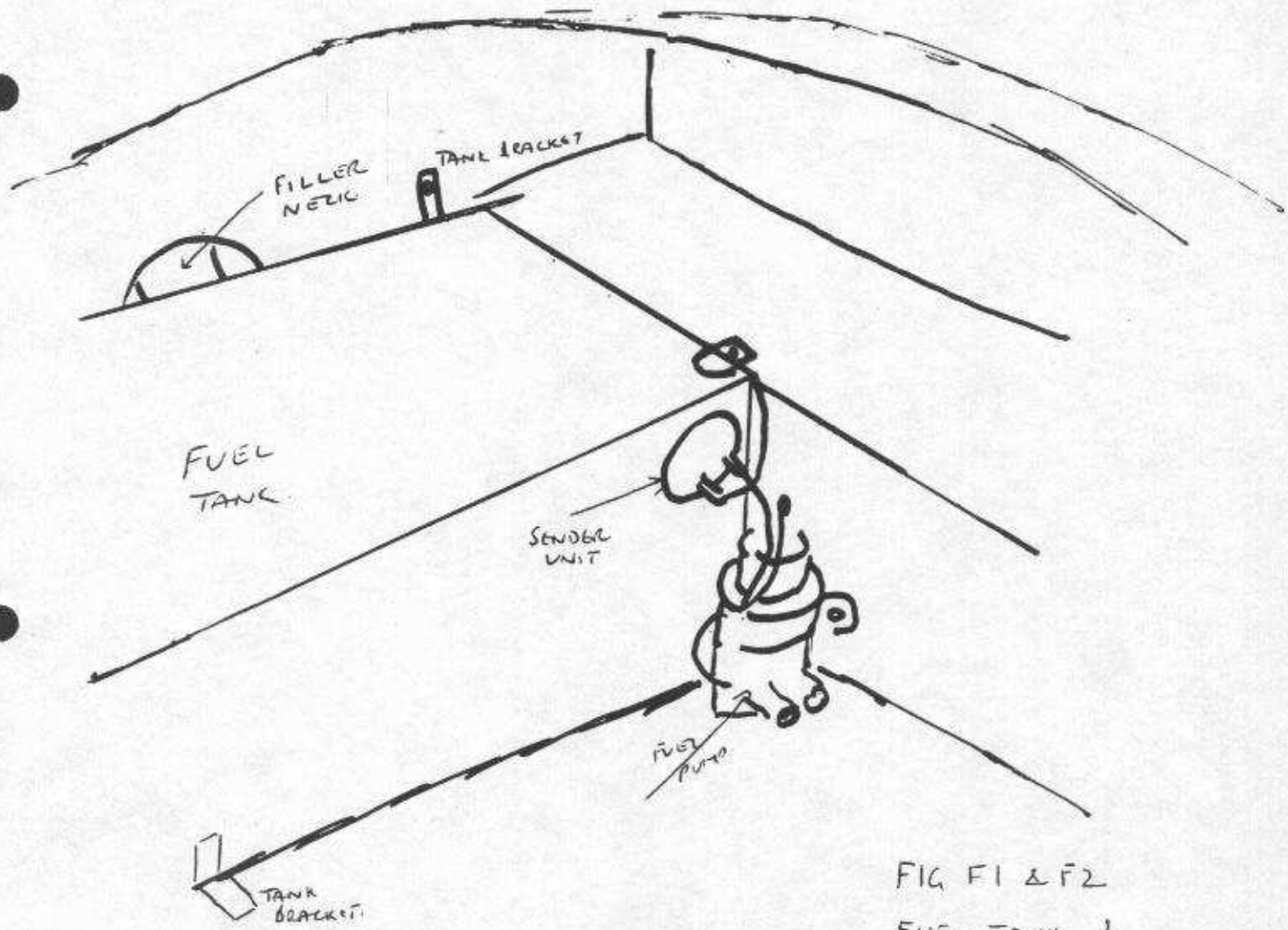


FIG F1 & F2
FUEL TANK &
FUEL PUMP

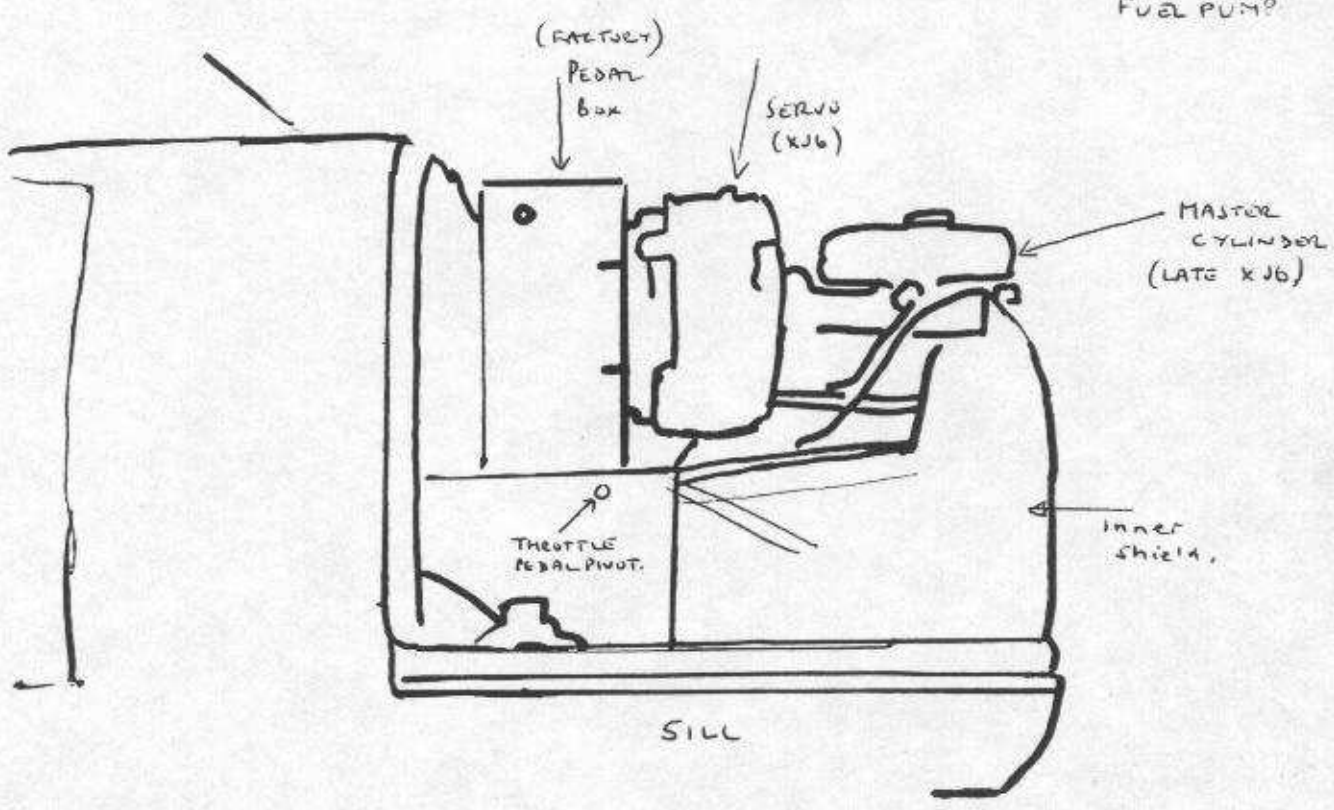


FIG E1 BRAKE MASTER CYLINDER SERVO

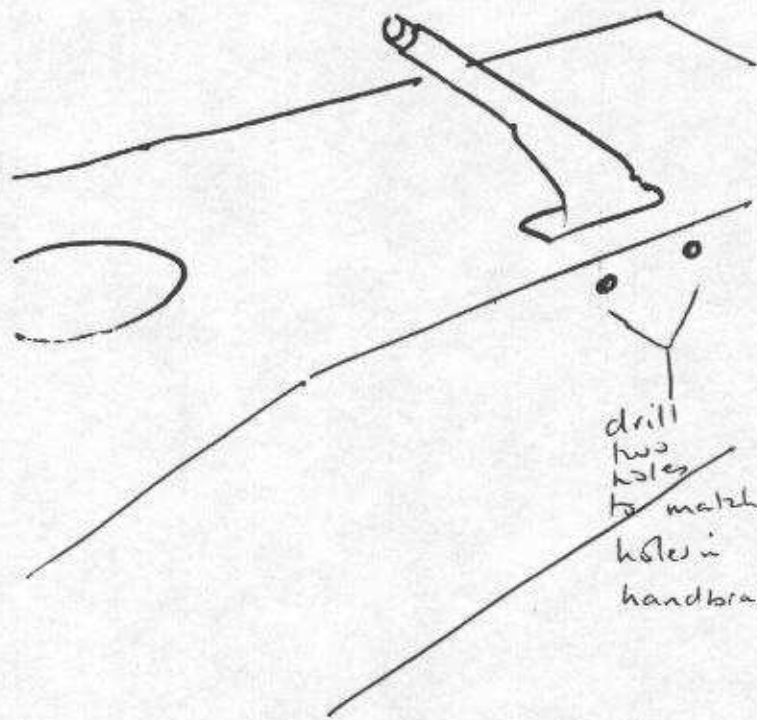


FIG E9
Mounting the
handbrake

drill
two
holes
to match
holes in
handbrake.

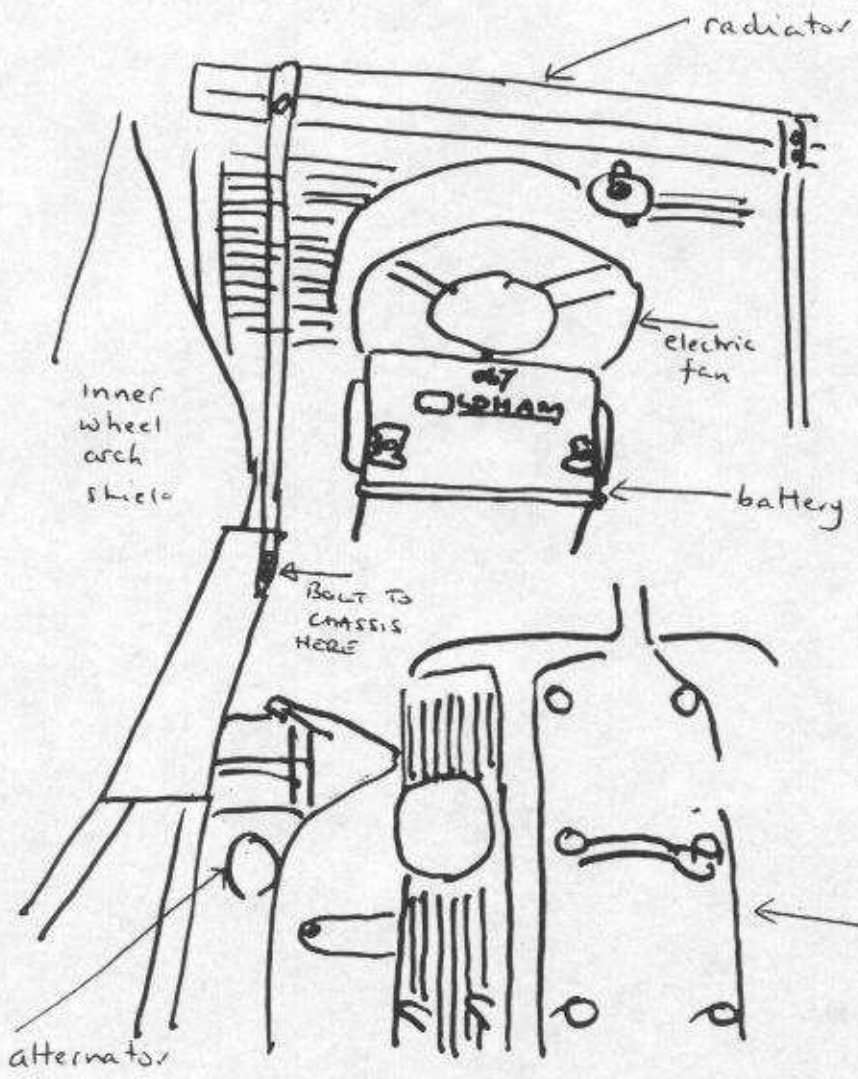


FIG I2
Radiator tie rods
(use XJB cross brace
tubes cut down)

battery (sits in tray in front of
steering rack)

engine

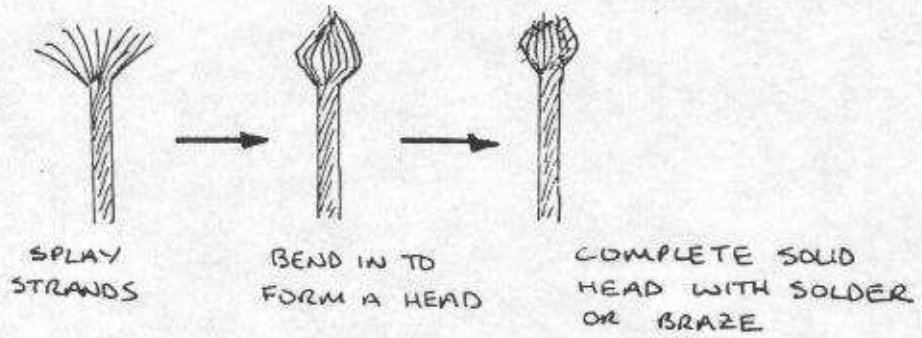
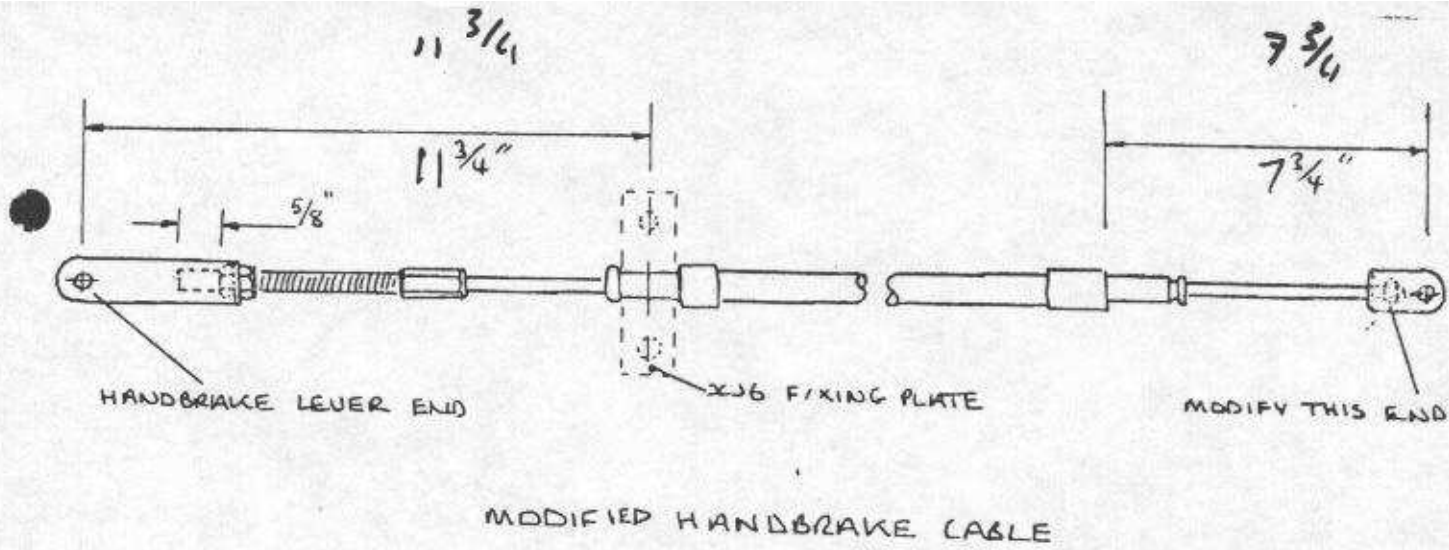
alternator

Bolt to
chassis
here

inner
wheel
arch
shield

radiator

electric
fan



POSSIBLE METHOD OF MODIFYING CABLE END

FIG E 10 - Shortening The Handbrake Cable

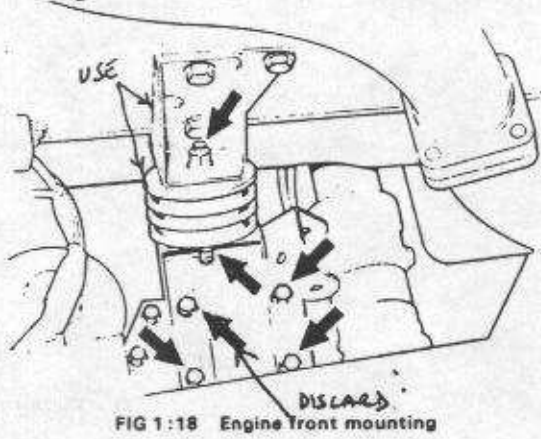
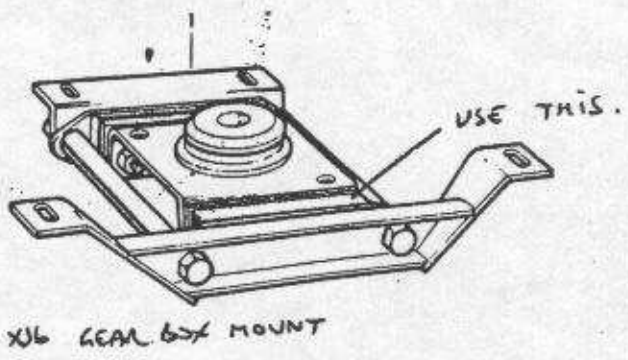
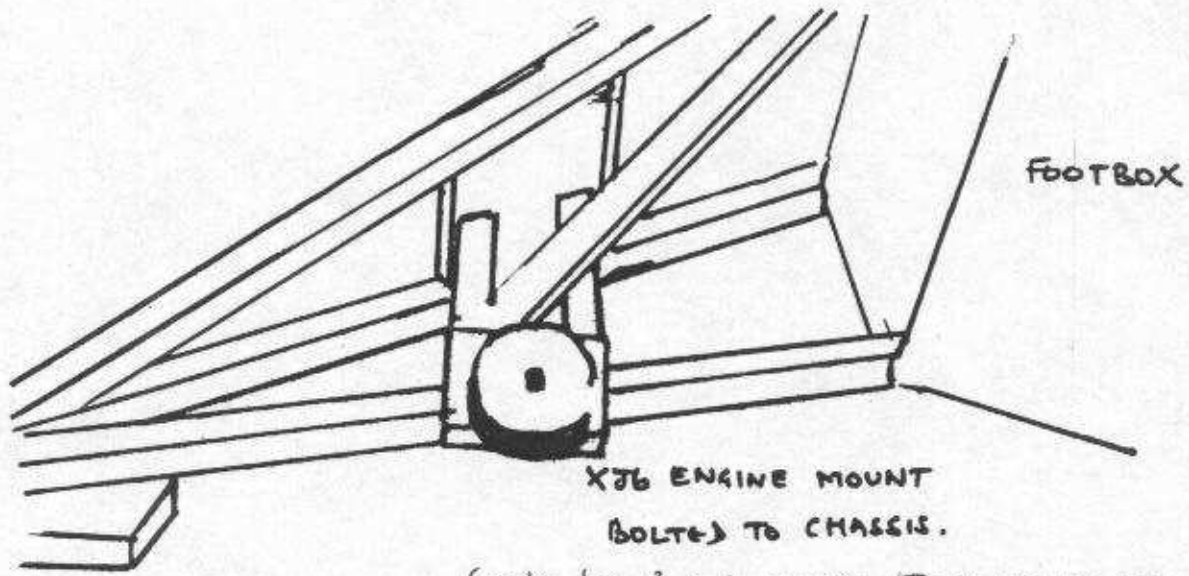


FIG H.1





FOOTBOX

X76 ENGINE MOUNT
BOLTED TO CHASSIS.

(note for 3 carb version THIN MOUNT required)

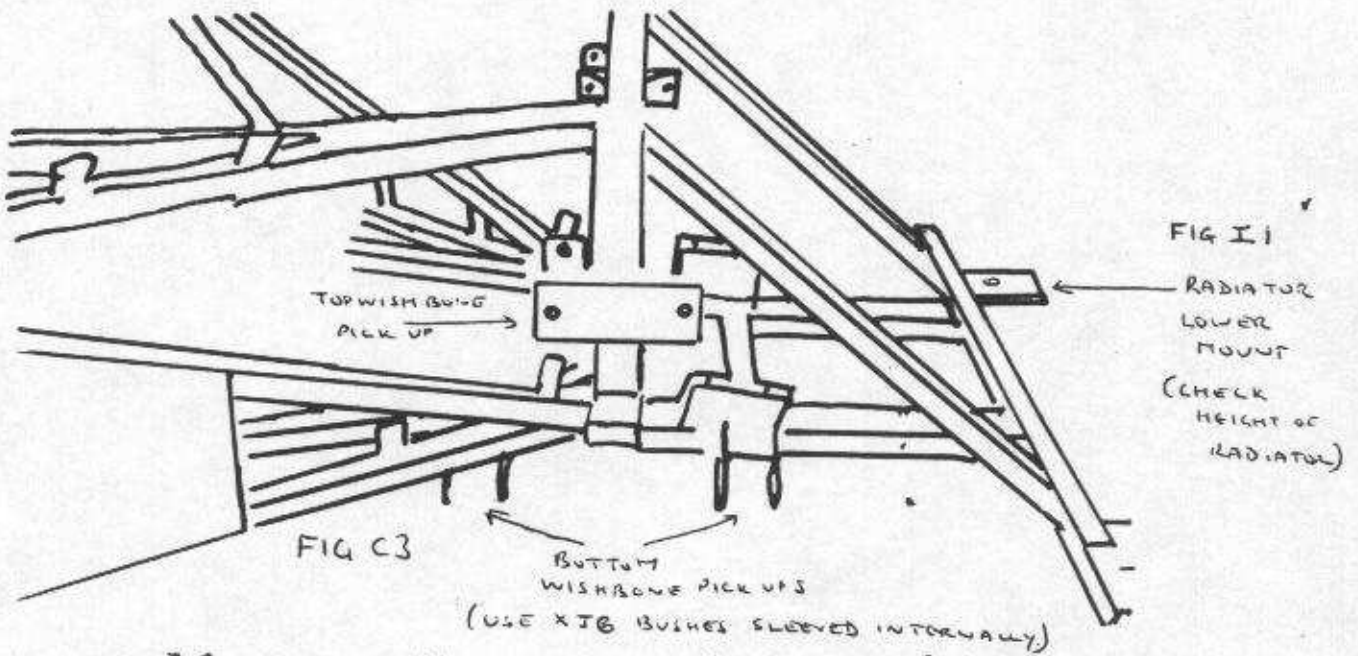


FIG I

RADIATOR
LOWER
MOUNT

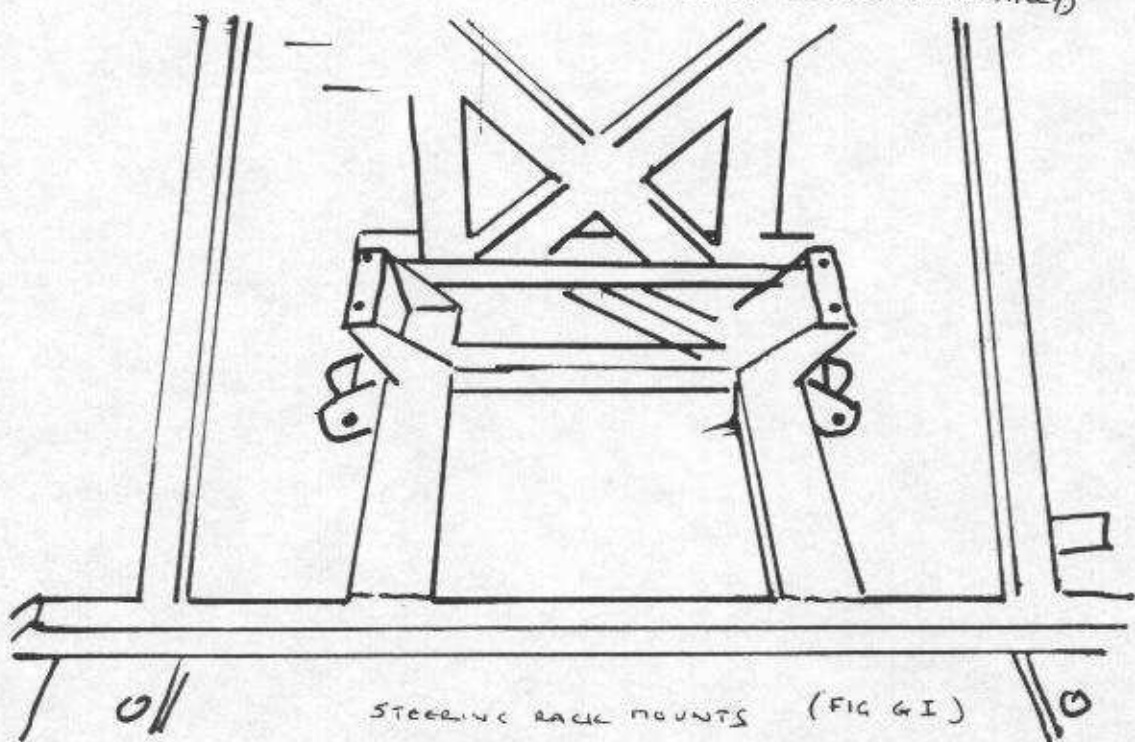
(CHECK
HEIGHT OF
RADIATOR)

TOP WISHBONE
PICK UP

FIG C3

BOTTOM
WISHBONE PICK UPS

(USE X76 BUSHES SLOVED INTERMEDIATELY)



STEERING RACK MOUNTS (FIG 4 I)

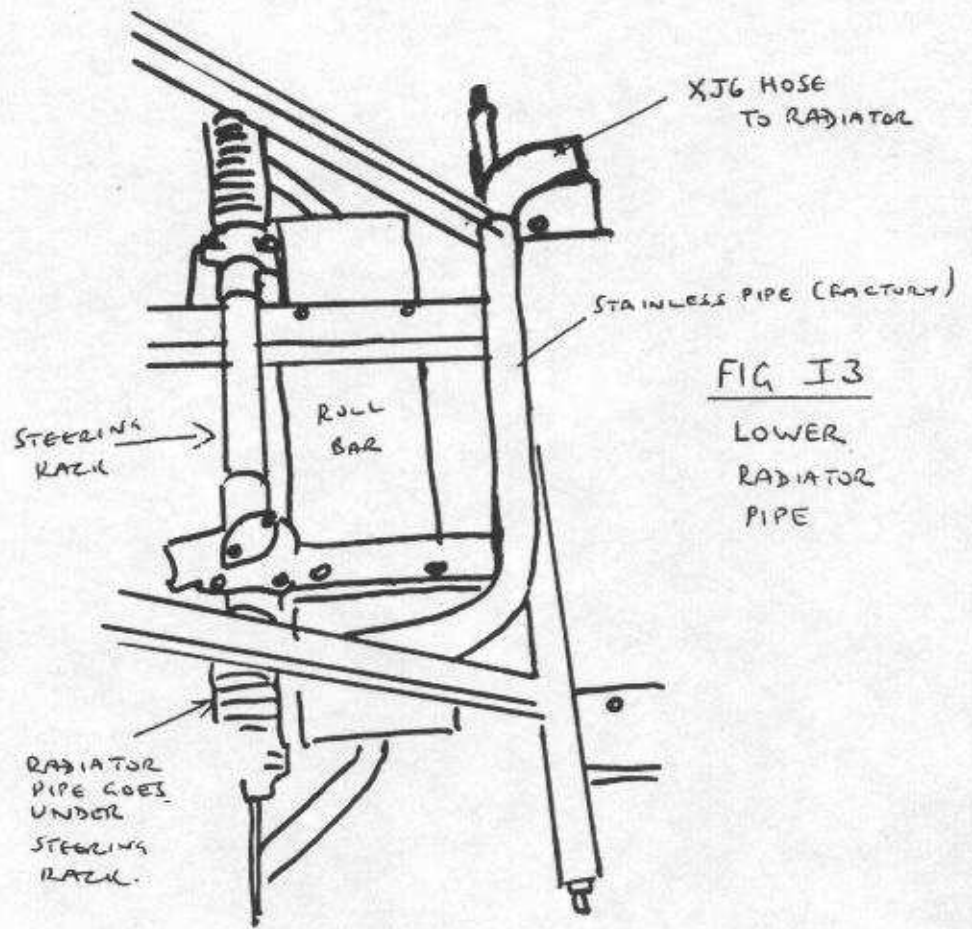


FIG I3

LOWER RADIATOR PIPE

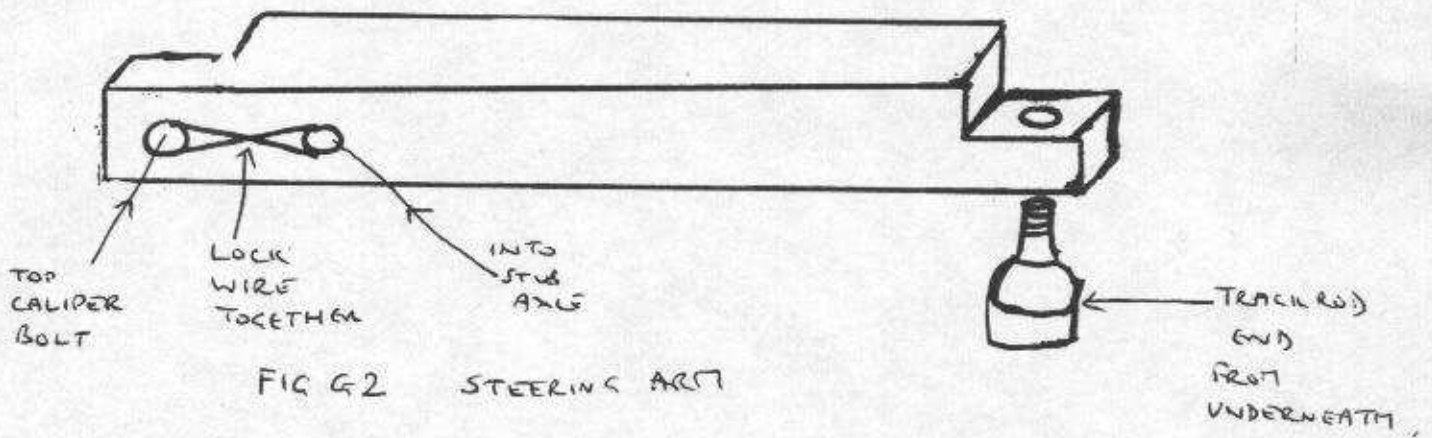


FIG G2 STEERING ARM

FIG G3 Components of steering column

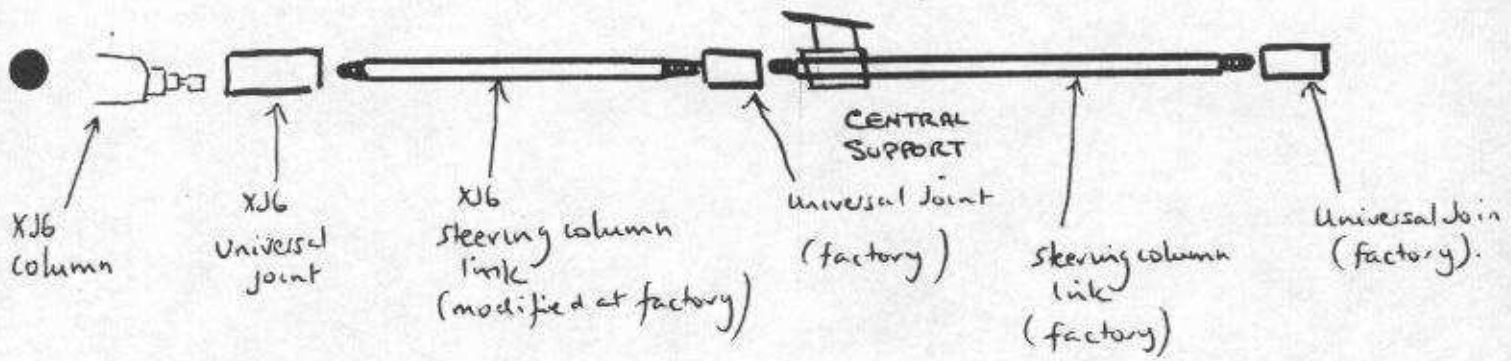


FIG G4

Steering column inner mount (LEFT HAND DRIVE)

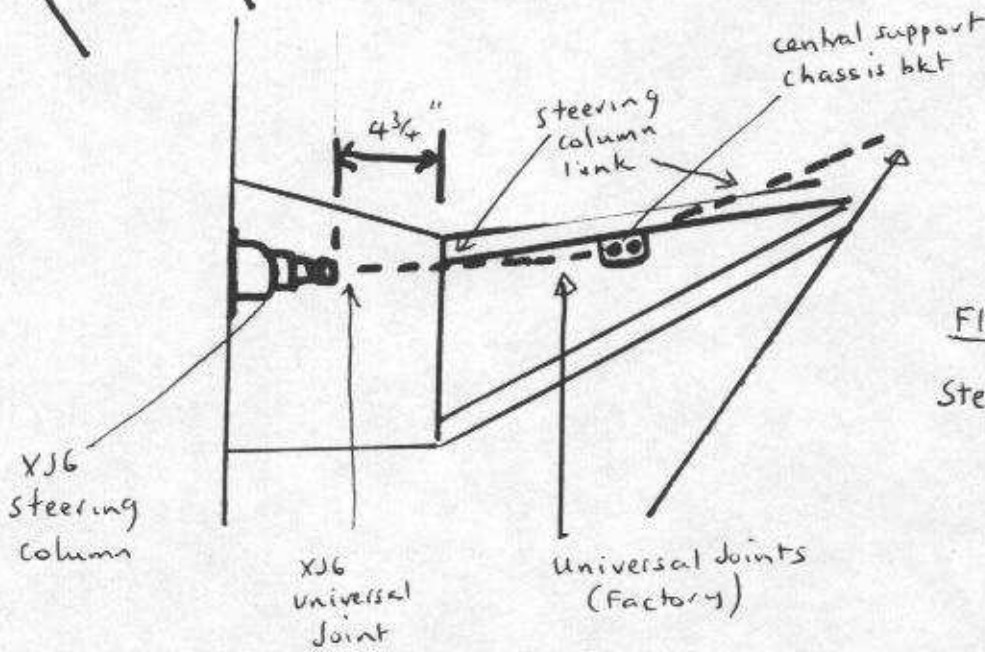
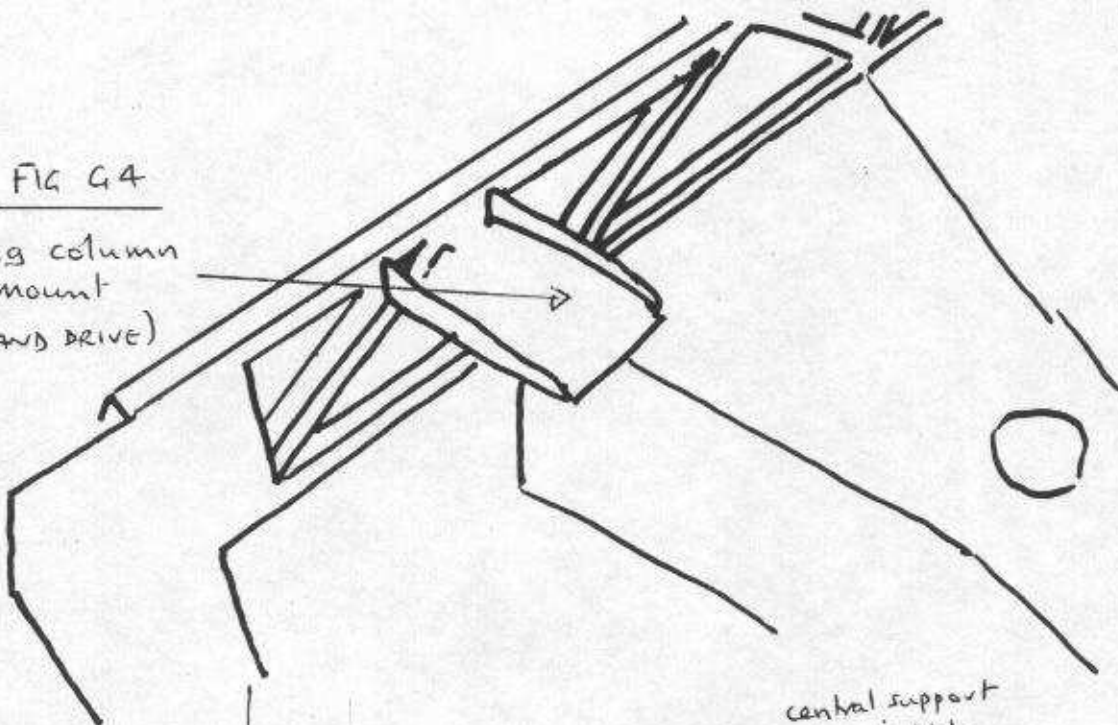
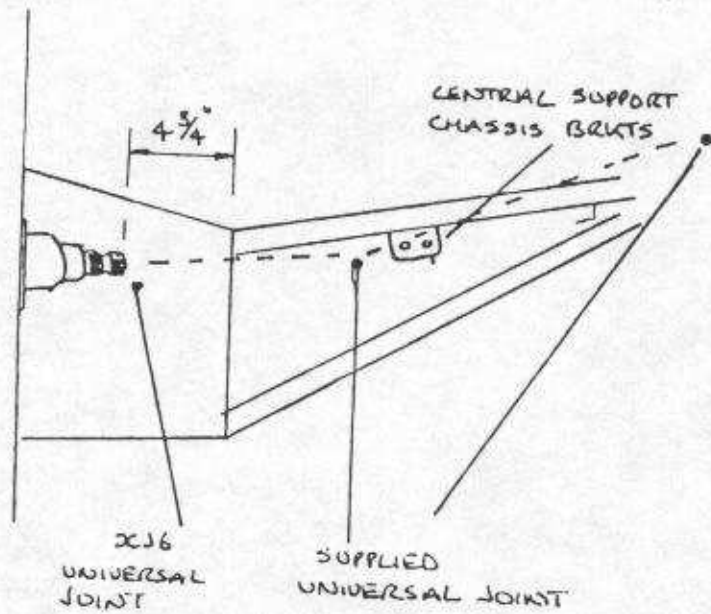


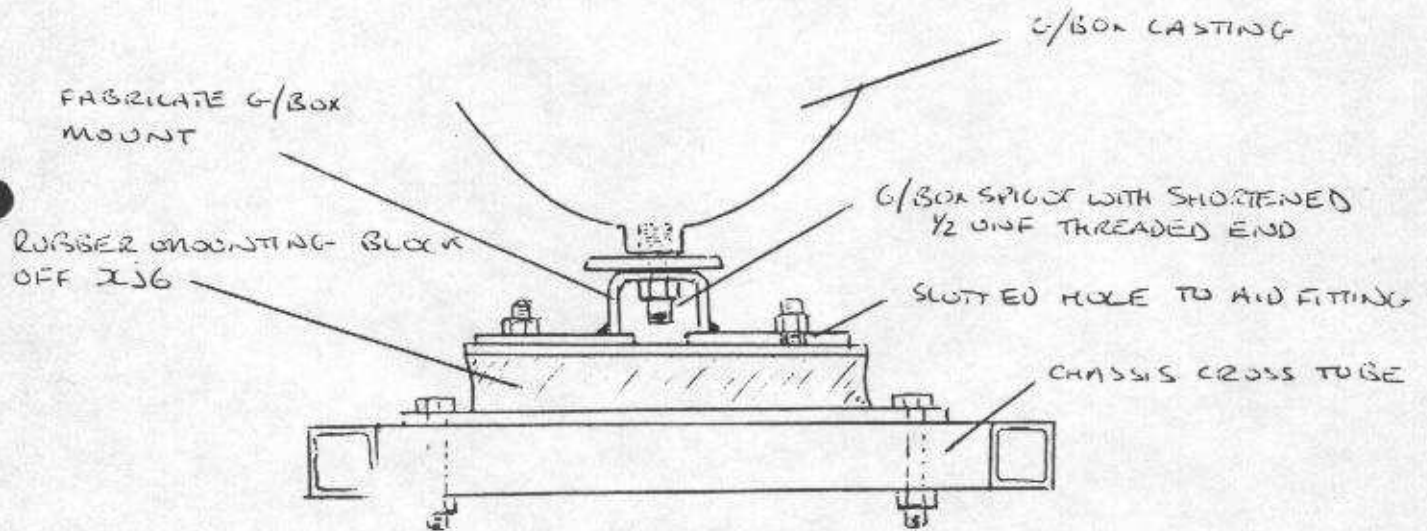
FIG G5

Steering column route



STEERING COLUMN ROUTE

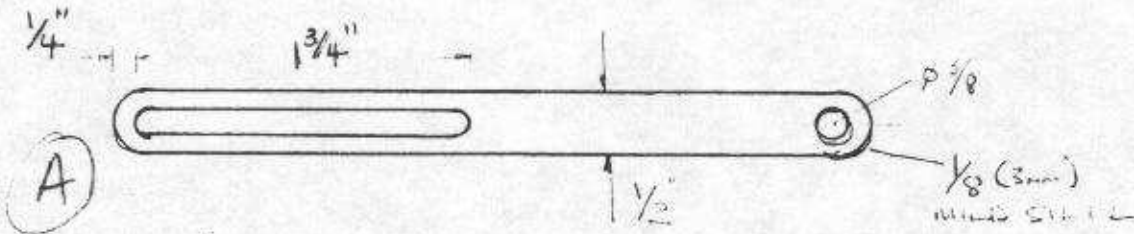
FIG G5



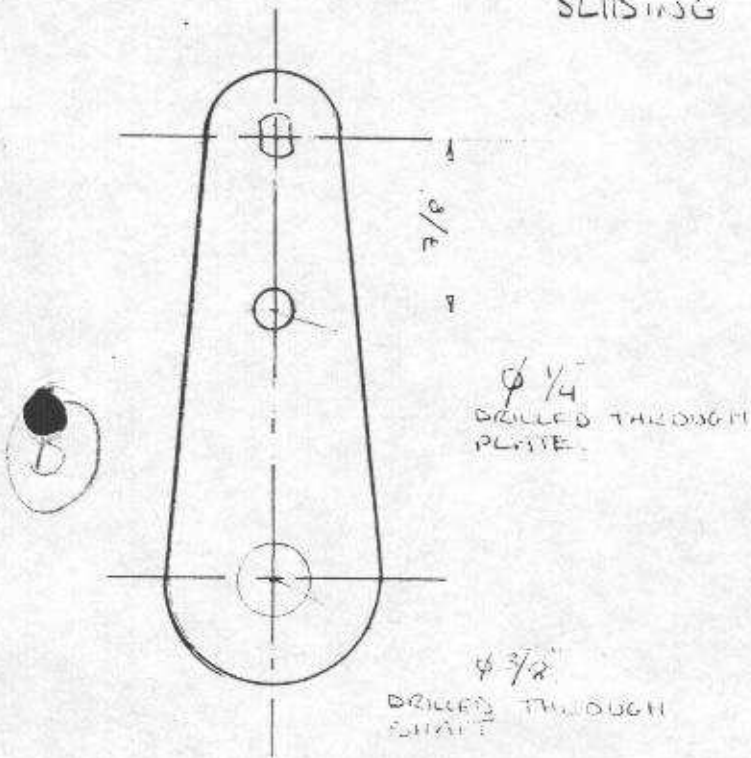
NOTE: G/BOX POSITIONED TO ALLOW CLEARANCE ON SPEEDOMETER TAKEOFF

FIG H2 - Challenger gearbox mounting

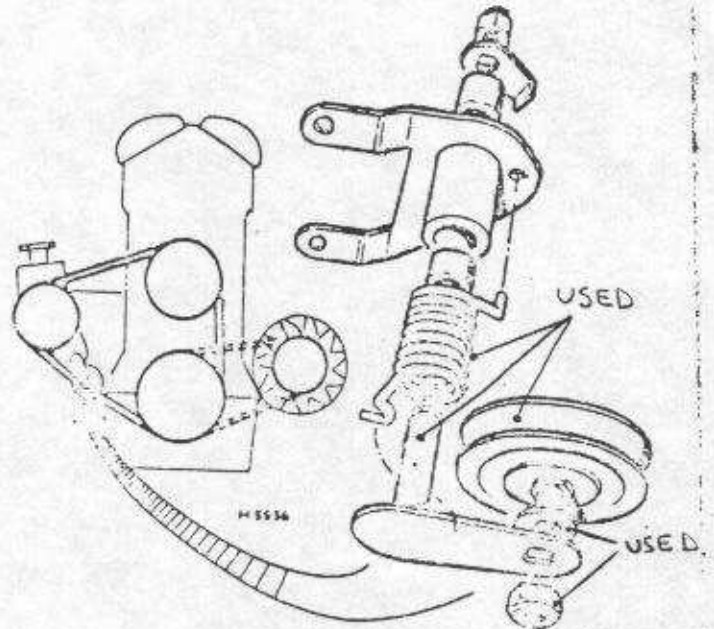
3 3/4



SLIDING ADJUSTER.



JOCKEY WHEEL DRILLING DIMENSIONS.



PARTS UTILISED OFF POWER STEERING PUMP JOCKEY WHEEL

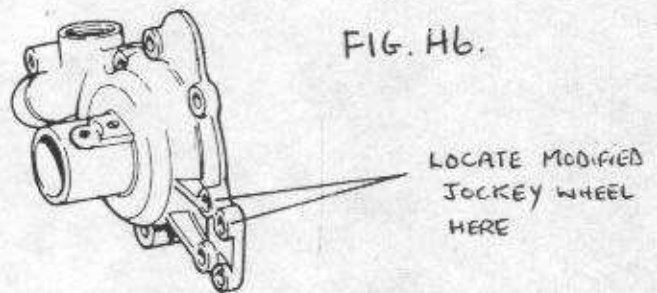
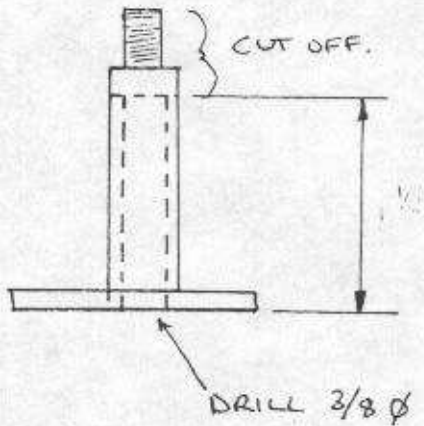


FIG. H6.

AB & C No Longer used

FIG H5

THE JOCKEY WHEEL.

FIG 1

S1/P1	Multi Pin Connector	Engine Harness
S2/P2	Multi Pin Connector	Ignition Switch
S3/P3	Multi Pin Connector	Ind/Dip Switch
P4	Multi Pin Connector	Wiper Motor
S5/P5	Multi Pin Connector	Dash Harness
S6/P6	Multi Pin Connector	Dash Harness
S7/P7	Multi Pin Connector	Dash Harness
S8/P8	Multi Pin Connector	Dash Harness

COLOUR CODE

B -- BLACK	P -- PURPLE	W -- WHITE
G -- GREEN	R -- RED	LG -- LIGHT GREEN
N -- BROWN	U -- BLUE	
O -- ORANGE	Y -- YELLOW	

1	Brake Light Switch	13	N/S Front Lights
2	Horn	14	O/S Front Lights
3	Ignition Coil	15	Starter Motor
4	Ballast Resistor	16	Washer Pump
5	Inter Light Sw (Door)	17	Oil Press W/L Sw
6	Hazard Fl Unit	18	Oil Press Guage Sw
7	Flasher Unit	19	Water Temp Switch
8	Fuse Box	20	Alternator
9	Heater Fan	21	Rev Light Switch
10	Tank Unit	22	Electric Fuel Pump
11	N/S Rear Lights	23	Electric Fan
12	O/S Rear Lights		

L1

GENERAL LAYOUT OF MAIN LOOM

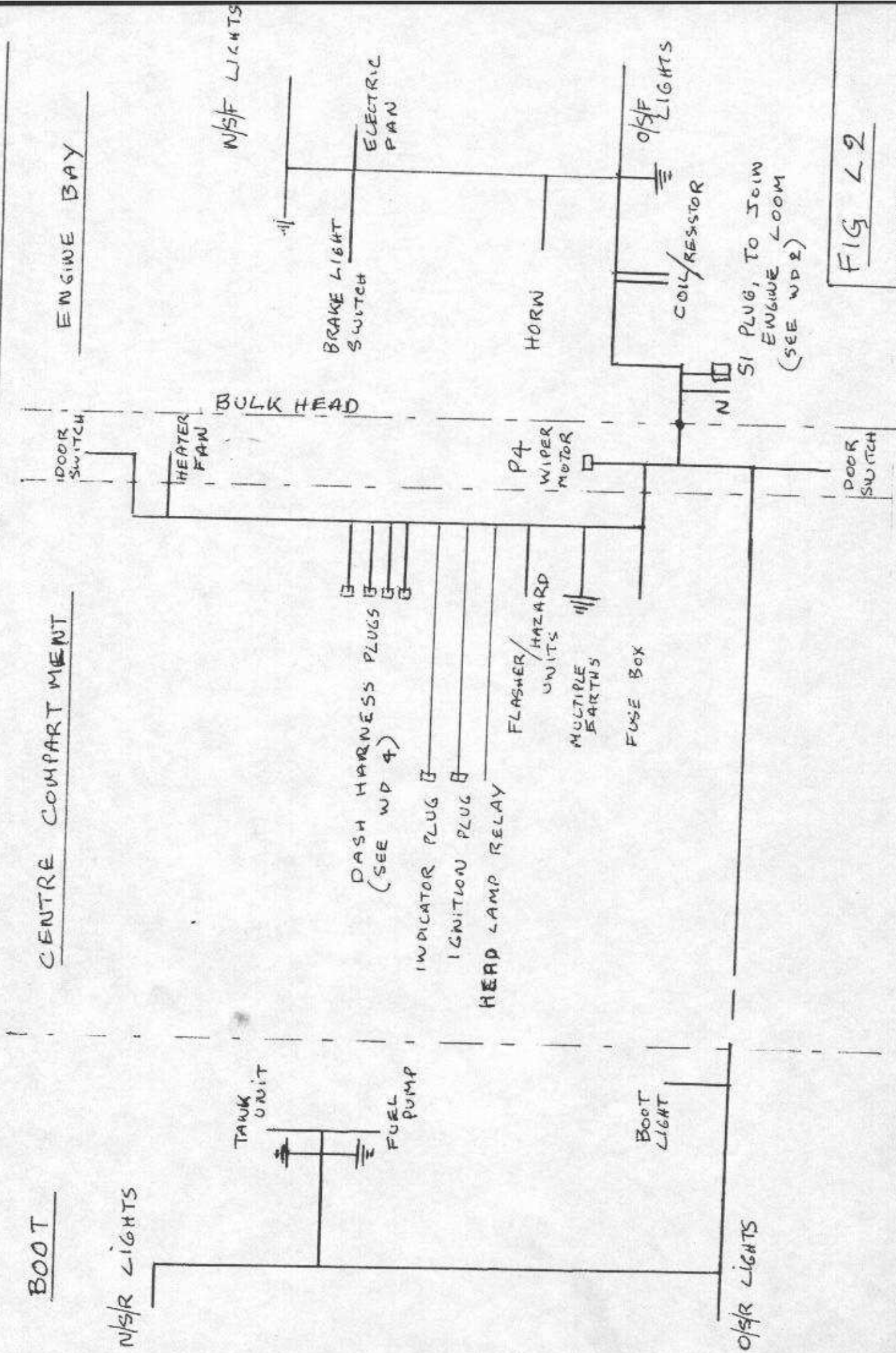


FIG L2

GENERAL LAYOUT

WASH WIRING (MAIN L.C.M.)

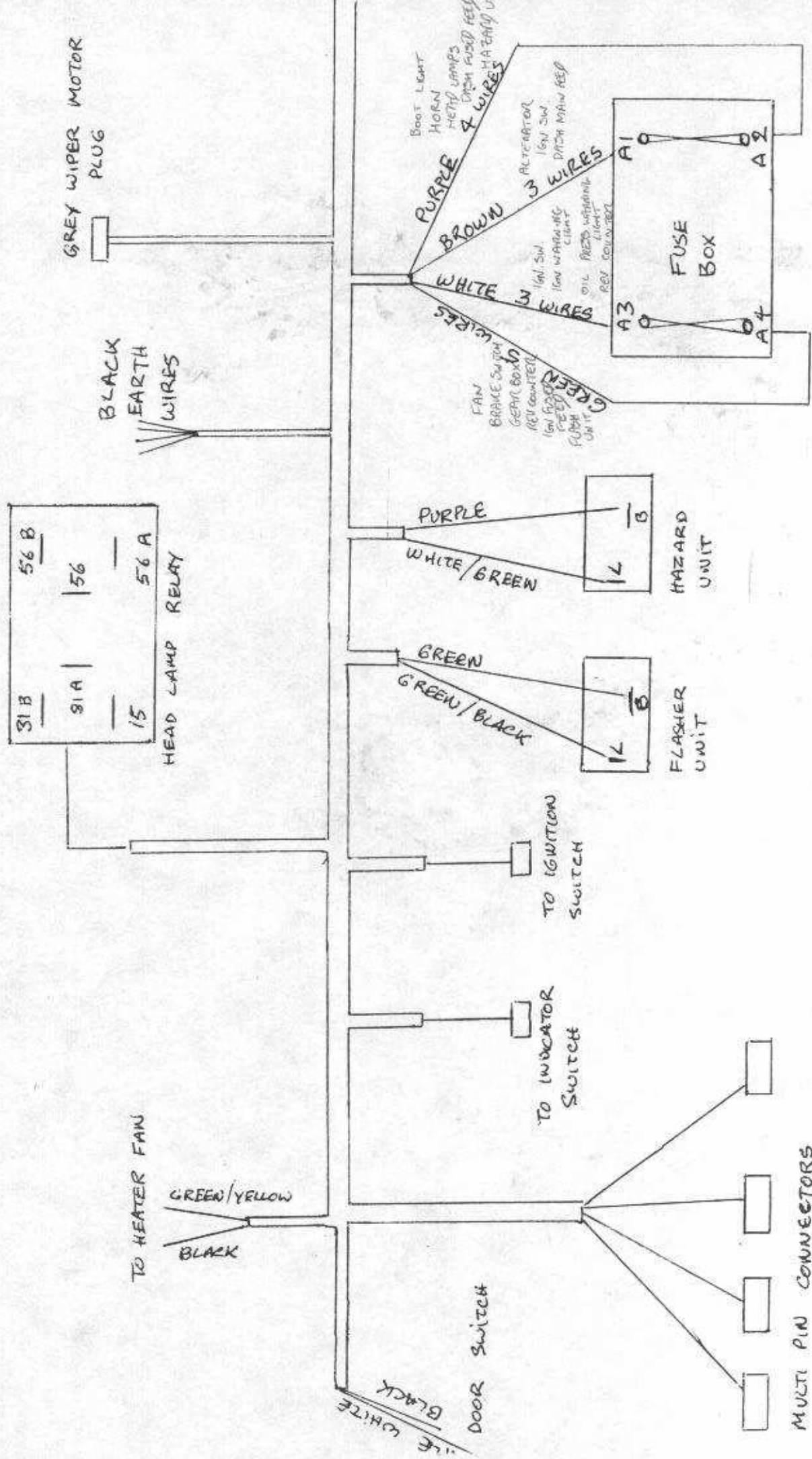
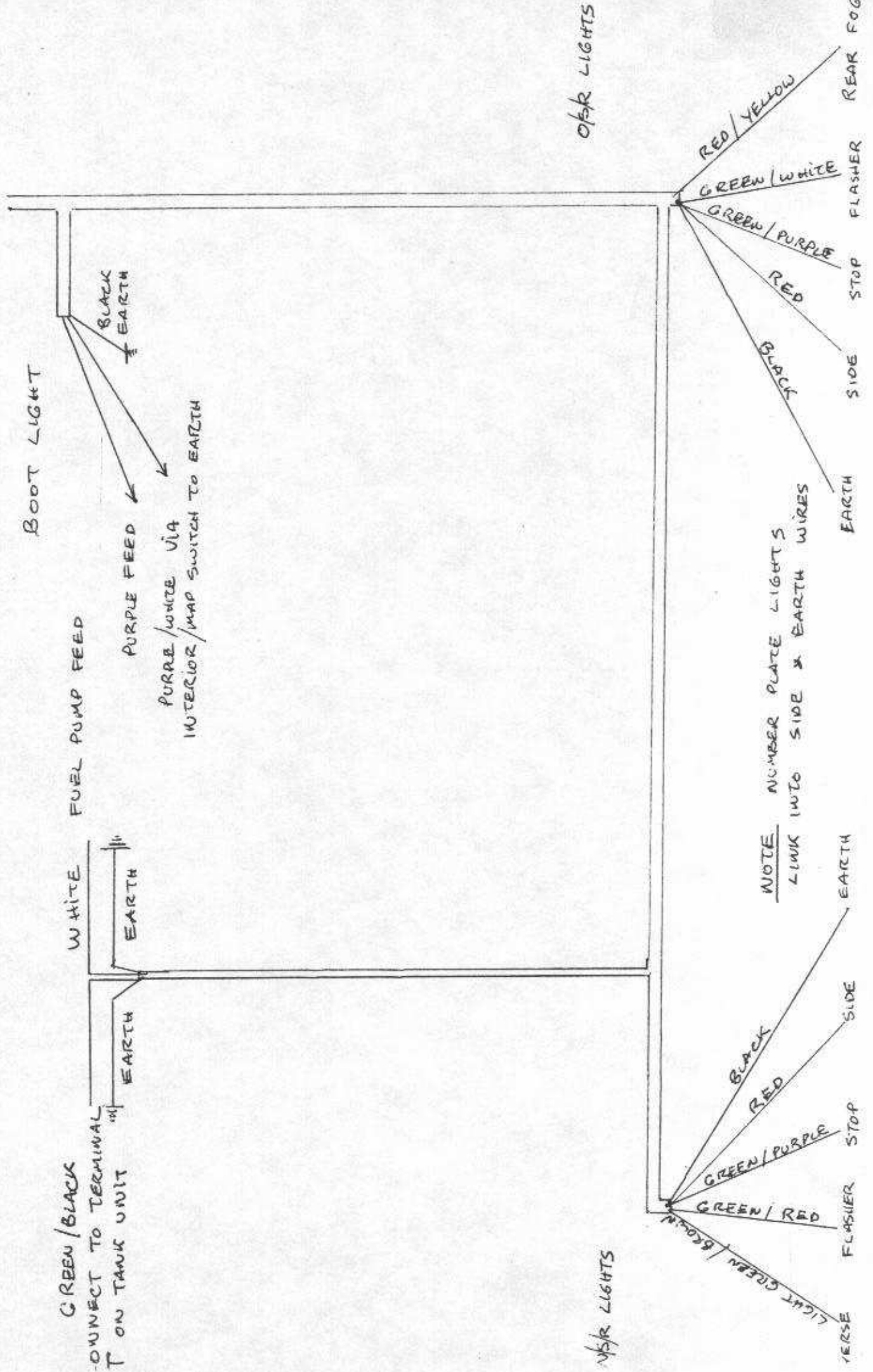


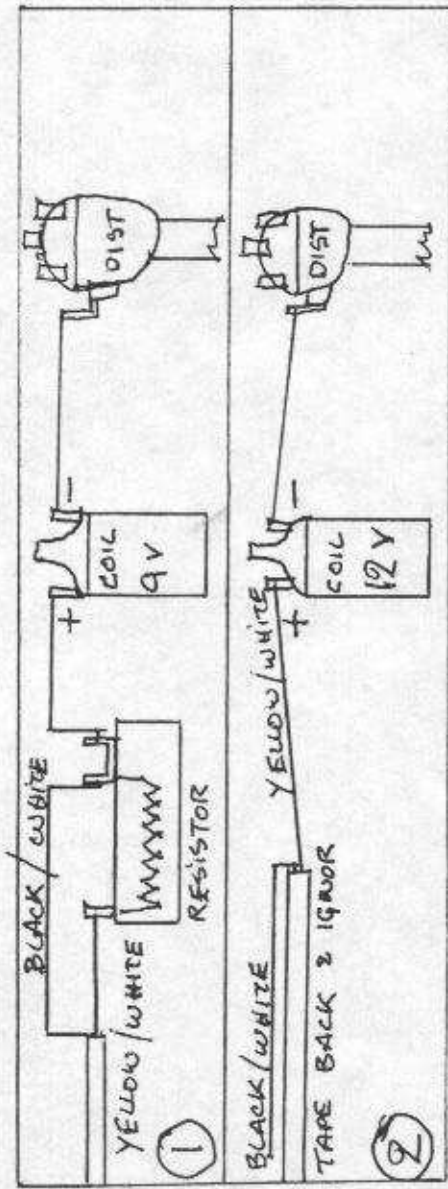
FIG. L3

FIG L4

BOOT WIRING



MAIN LOOM ENGINE COMPARTMENT & IGNITION SYSTEMS



1) BALLAST RESISTOR SYSTEM

2) STANDARD 12V SYSTEM

GREEN/PURPLE & GREEN

CONNECT TO BRAKE LIGHT SWITCH

PURPLE/BLACK & PURPLE

CONNECT TO HORN

MAIN LOOM (ENGINE SIDE OF BULKHEAD)

W/S/F LIGHTS
FLUORESCENT
G/R R S/P B CHCH U/R P/P U/W
MAIN

GREEN
FEED FOR FAN

O/S/F LIGHTS

G/W R B U/R U/W

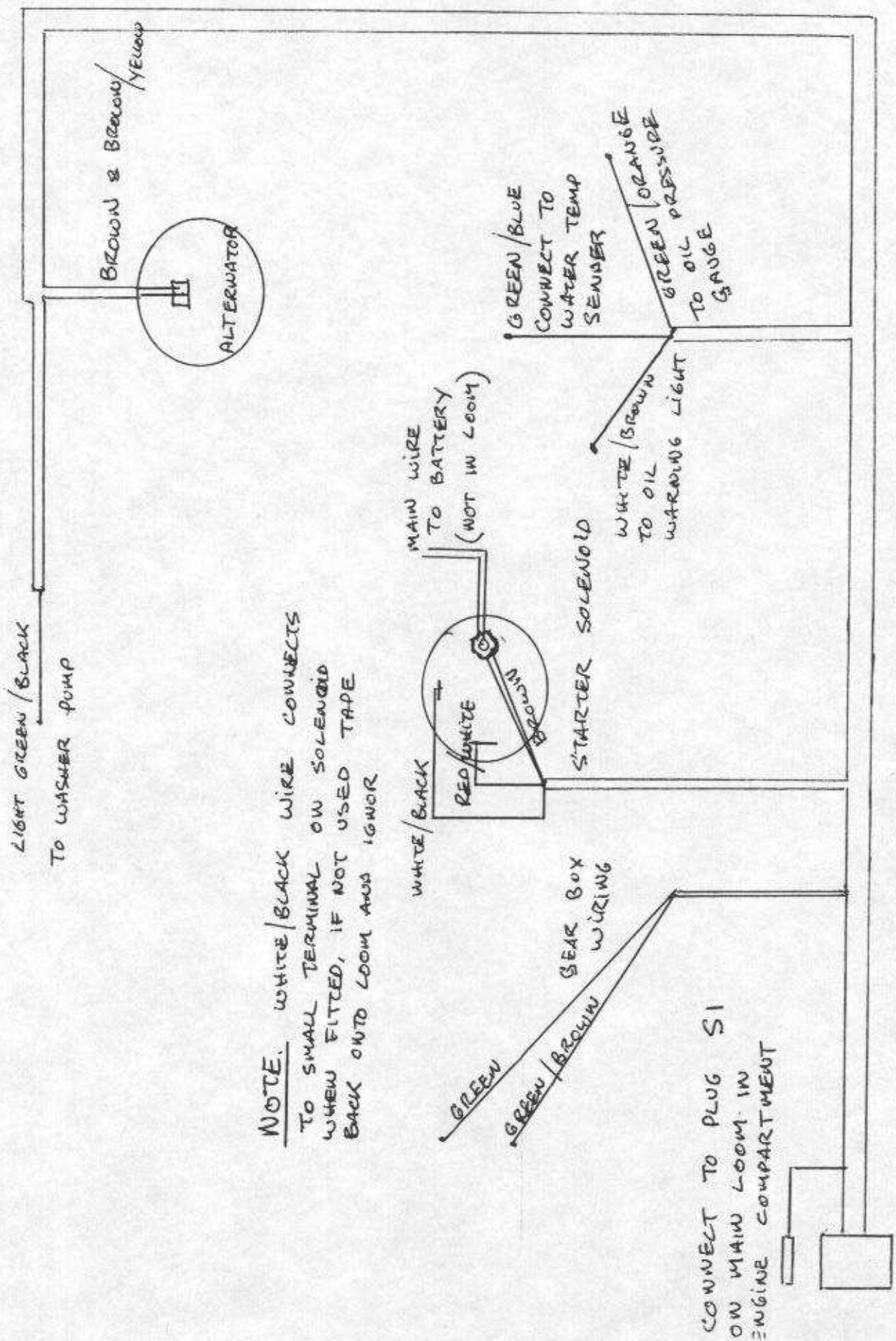
BLACK
EARTH

PLUG S1. AND SINGLE ROW WIRE CONNECTOR JOINTS TO ENGINE LOOM

YELLOW/WHITE
BLACK/WHITE
IGNITION COIL CONNECTION (SEE INSET)

FIG. L5

ENGINE HARNESS FIG 66



NOTE. WHITE/BLACK WIRE CONNECTS TO SMALL TERMINAL ON SOLENOID WHEN FITTED, IF NOT USED TAPE BACK ONTO LOOM AND IGNORE

CONNECT TO PLUG SI ON MAIN LOOM IN ENGINE COMPARTMENT

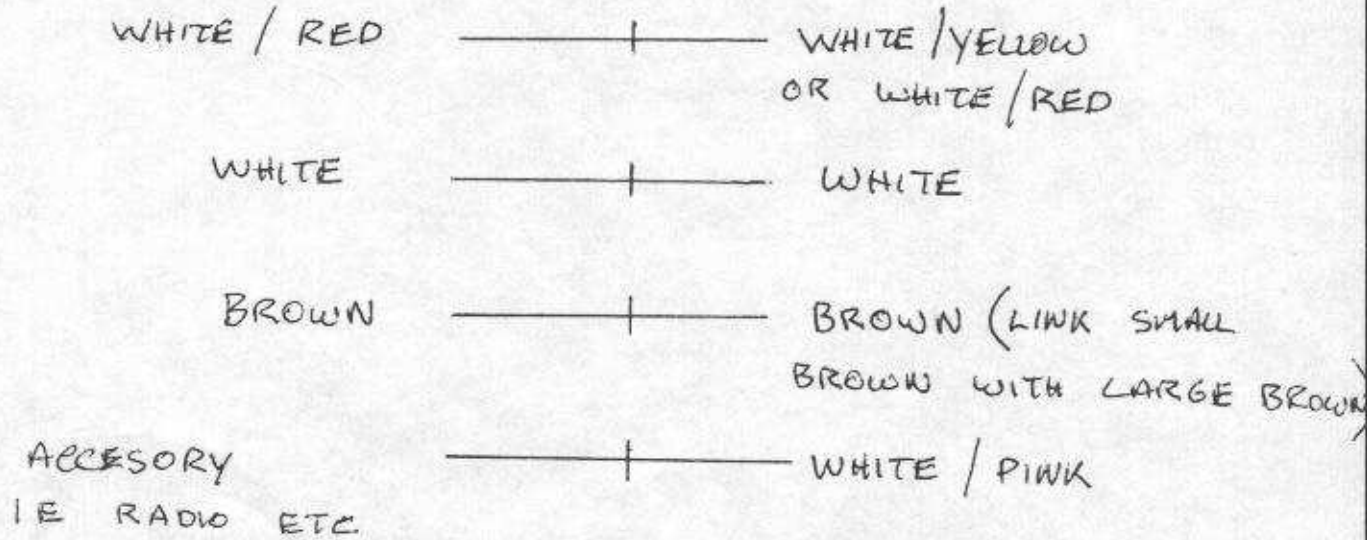
JAGUAR IGNITION SWITCH

REMOVE OLD PLUG FROM IGNITION LOOM AND REPLACE WITH NEW PLUG TO MATCH CHALLENGER WIRING HARNESS

FIG 9.

CHALLENGER WIRING COLOURS

JAGUAR IGNITION WIRING COLOURS



VOLVO TYPE HEAD LAMP RELAY

- BLUE / WHITE ——— 56 A
- BLUE / RED ——— 56 B
- BLUE ——— 56
- LIGHT GREEN / YELLOW — 31 B
- PURPLE ——— 15 & 81 A

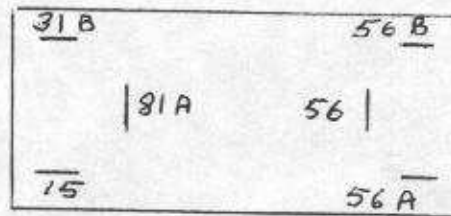


FIG 7

INDICATOR SWITCH WIRING

REMOVE OLD PLUG FROM INDICATOR SWITCH AND REPLACE WITH NEW PLUG TO MATCH CHALLENGER WIRING HARNESS

FIG L10

CHALLENGER WIRING COLOURS

JAGUAR INDICATOR COLOURS

GREEN / BROWN POLE

GREEN / BROWN

GREEN / RED LEFT

GREEN / RED

GREEN / WHITE RIGHT

GREEN / WHITE

LIG GREEN / YELLOW DIP/MAIN

BLUE / WHITE

BLACK DIP/MAIN RET.

PURPLE

SPEED OMMETER / REV COUNTER WIRING

IGNITION WARNING LIGHT (RED)

WHITE & BROWN / YELLOW

OIL PRESSURE WARNING LIGHT (YELLOW)

WHITE & WHITE / BROWN

MAIN BEAM WARNING LIGHT

BLUE / WHITE

PANEL LIGHTS

RED / BLUE

RIGHT HAND INDICATOR (GREEN)

GREEN / WHITE & BLACK

LEFT HAND INDICATOR (GREEN)

GREEN / RED & BLACK

REV COUNTER WIRING

WHITE

WHITE

WHITE / BLACK

WHITE / BLACK

GREEN

GREEN

FIG
L8

NOTE

THE ENGINE WILL NOT RUN WITH THE REV COUNTER DISCONNECTED, IF THE ENGINE RUNS BUT THE REV COUNTER DOES NOT OPERATE SWOP THE WHITE & WHITE / BLACK WIRES

DASH WIRING LOOM COLOUR CODE

BROWN / N / Main Feed
PURPLE / P / Fused Main Feed
WHITE / W / Ign Feed
GREEN / G / Ign Fused Feed
RED / R / S / Lht Feed
BLUE / U / H / Lht Feed
BLUE/WH/ UW/ Main Beam Feed
BLUE/RED/UR/ Dip Beam Feed
RED/BLUE /UR/ Panel Light Feed
RED/ORANGE/ RO/ Fog Light

BRW/YLL/NY/ IGN WL
WH/BRW/WN/ Oil Press WL
BLACK/B/EARTH/ Ground
GR/BLK/BB/ Tank Unit
L/GR/BLK/LGB/ Screenwasher
GR/BRW/GN/Ind SW Feed
WH/GR/WG/ Haz Ind Sw Feed
WH/BLK/WB/ Rev Counter Coil
GR/BLUE/GU/Temp Sender Feed
PUR/WH/PW/ Int Lht Sw
RED/GR/RG/ 1st Speed Wiper
BLUE/BRW/UN/2nd Speed Wiper
BRW/GR/NG/ Wiper Park Feed

OR

RED/YELLOW / RY/ Fog Light
GR/WH/GW/ R H Ind
GR/RD/GR/ L H Ind
GR/OR/GO/ Oil Pressure Gauge
GR/YLL/GY/ Heater Fan

SWITCH

TERMINALS

COL CODE

Heater/Fan	2/4	CY/G
Washer	1/2	G/LGB
Wiper	1/3/5/7	UN/G/RG/NG
H/Lht	1/2	U/N
S/Lht	1/2	R/N
Panel	2/4	RU or RW/R
Int	2/4	PW/B
Fog	1/2	R/RO or RY
Haz Ind	1/2/5/6/7	CN/GN/WG/GR/GW

NOTE: TERMS MAY DIFFER IN DIFFERENT SWITCHES

Col:

Rev Counter	G/W/WB
Ign W/L	W/NY
Oil W/L	W/WN
L H Ind	GR/B
R H Ind	GW/B
Main Beam W	UW/B

BORG WARNER MODEL 65 INHIBITOR RELAY WIRING

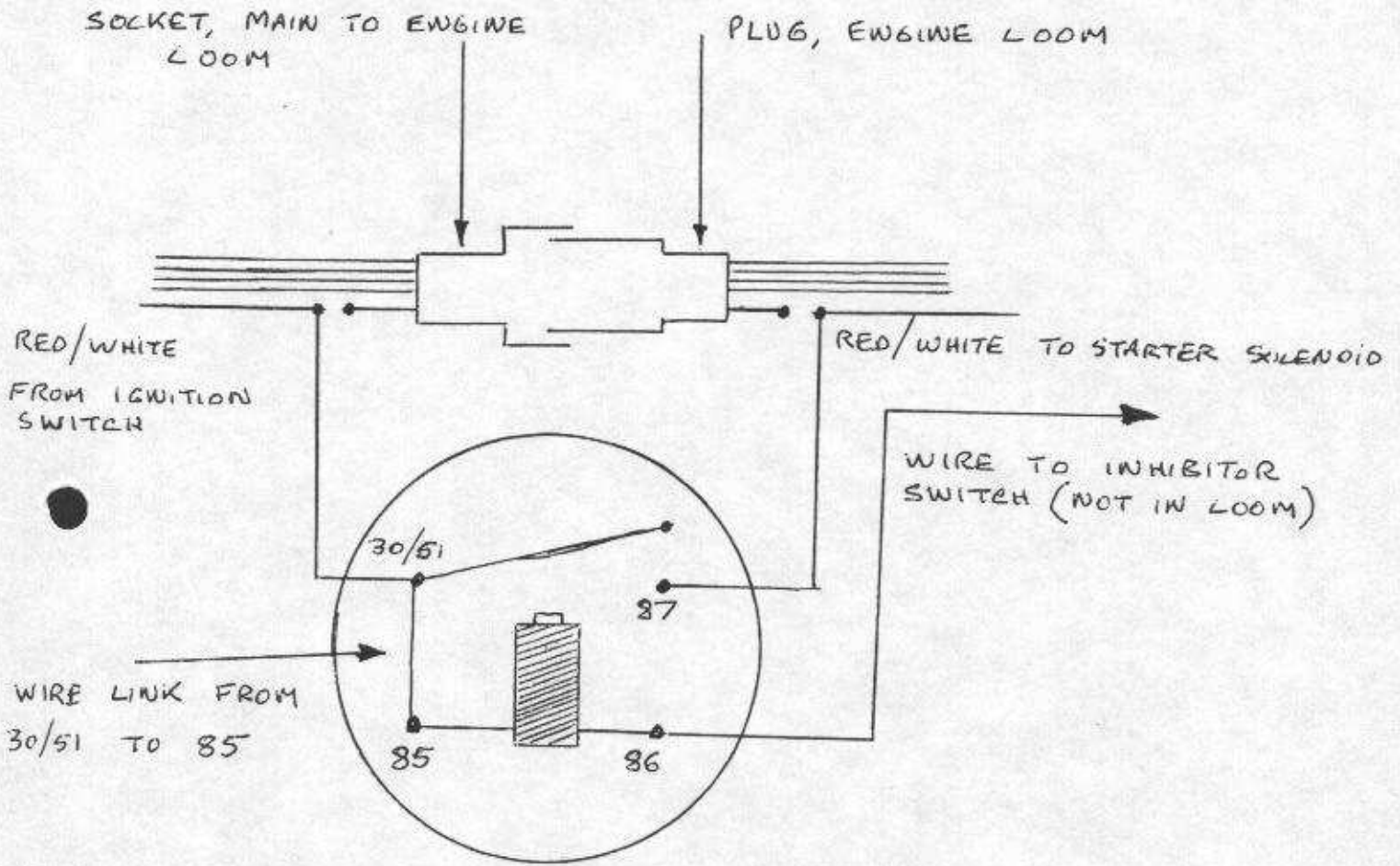


FIG L11

BORG WARNER MODEL 65 WIRING. (SELECTOR)

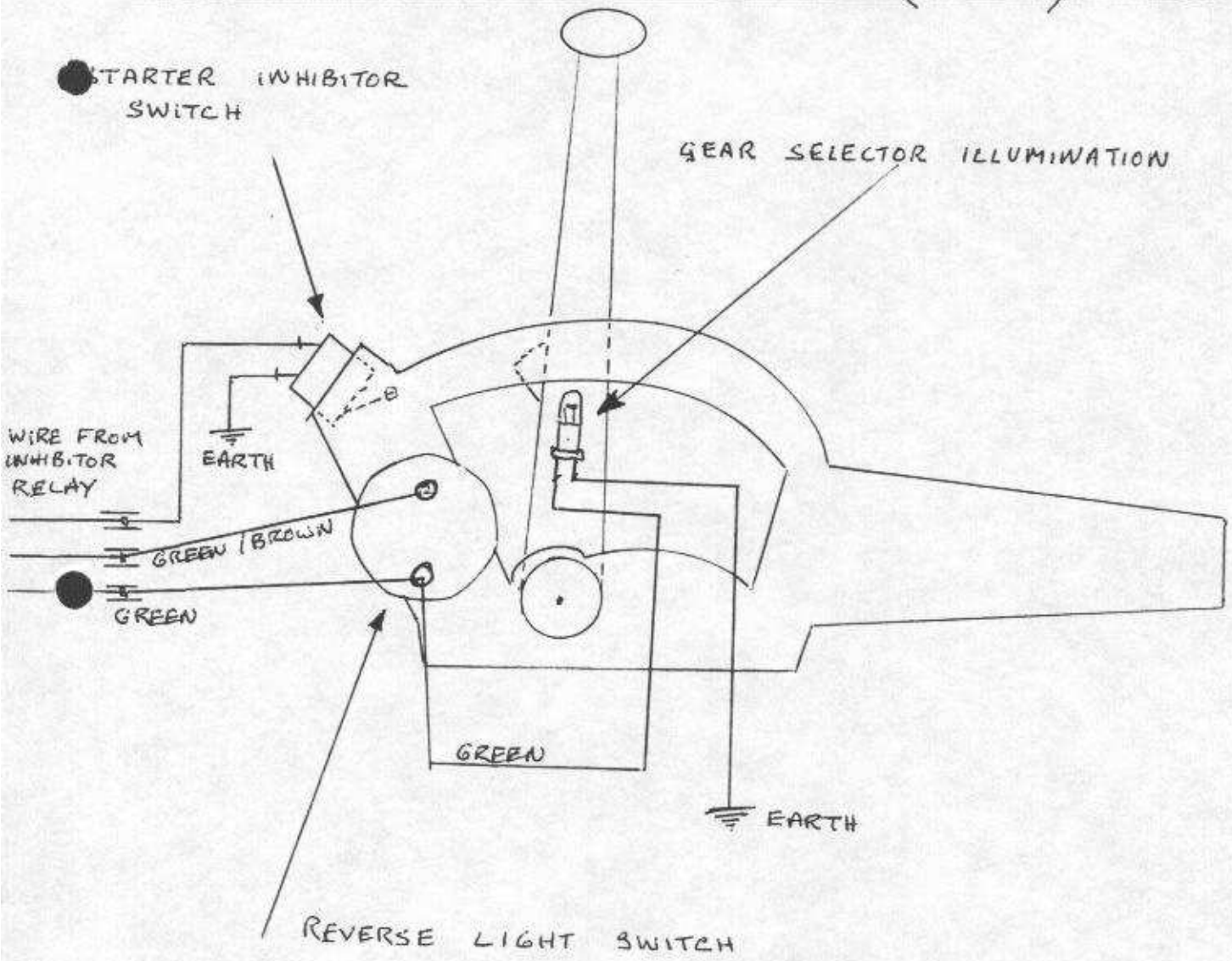


FIG 412

MANUAL GEAR BOX / OVER DRIVE WIRING

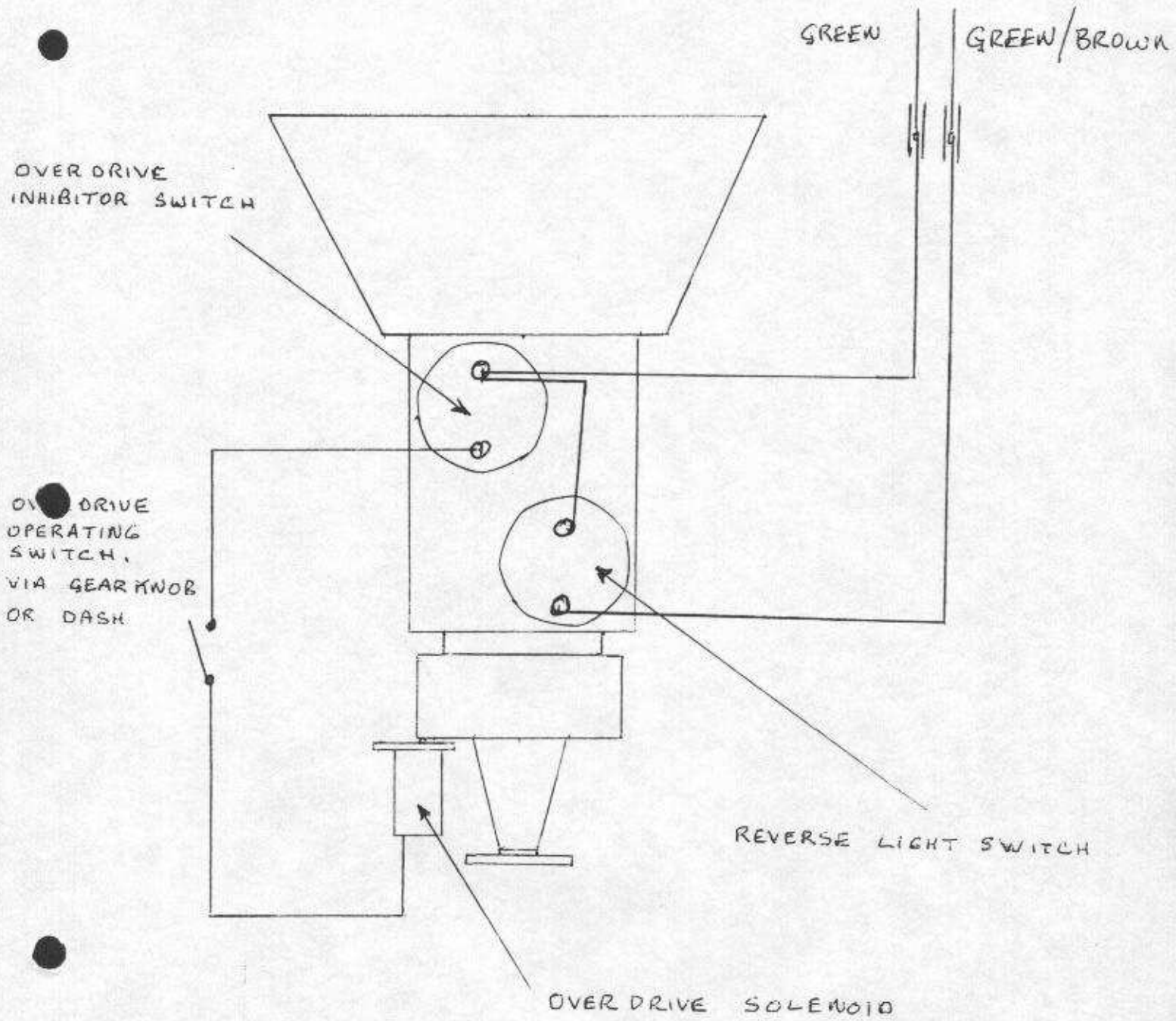


FIG L13

BORG WARNER MODEL 65

POSITION OF GEAR SELECTOR BOX

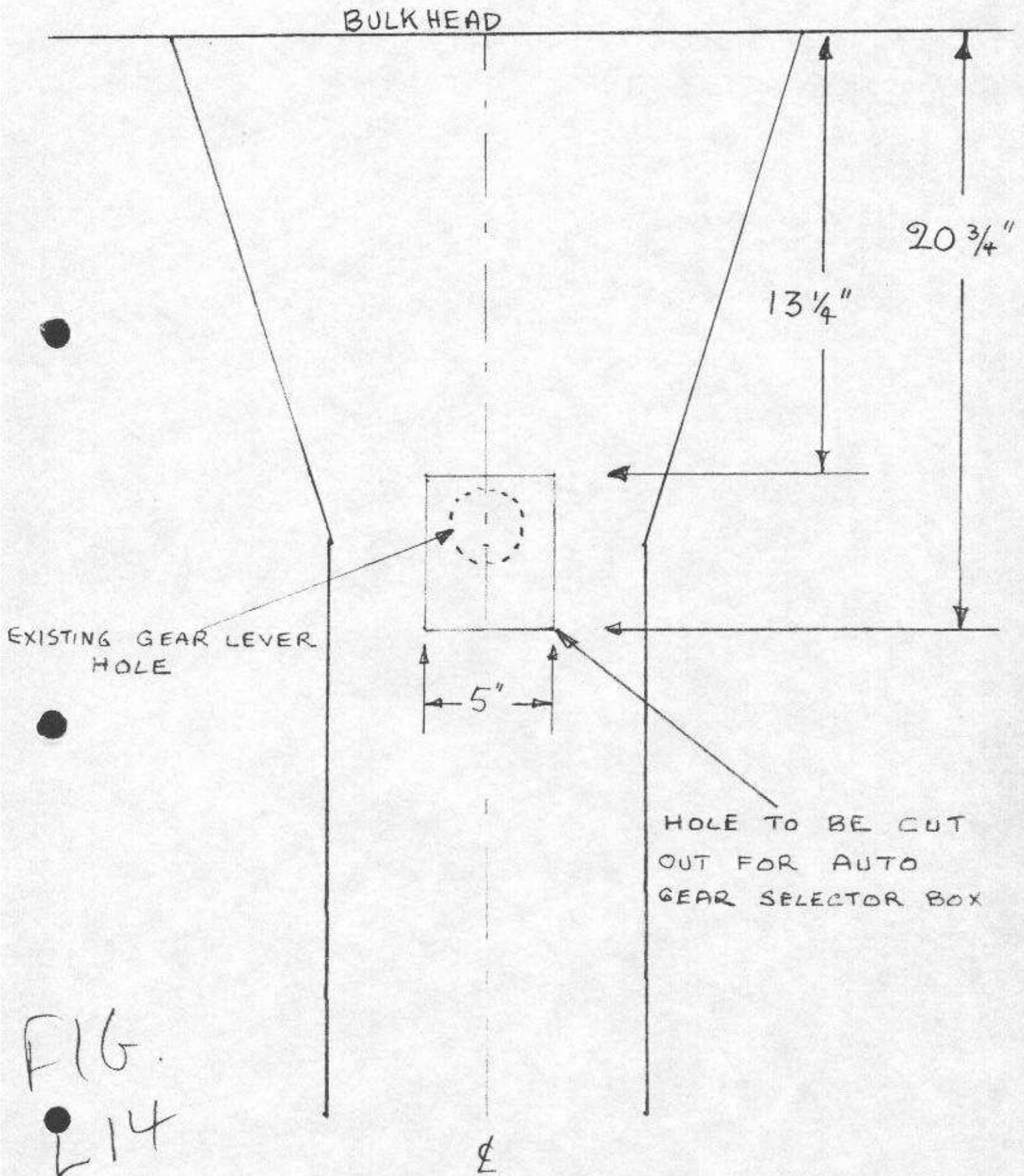
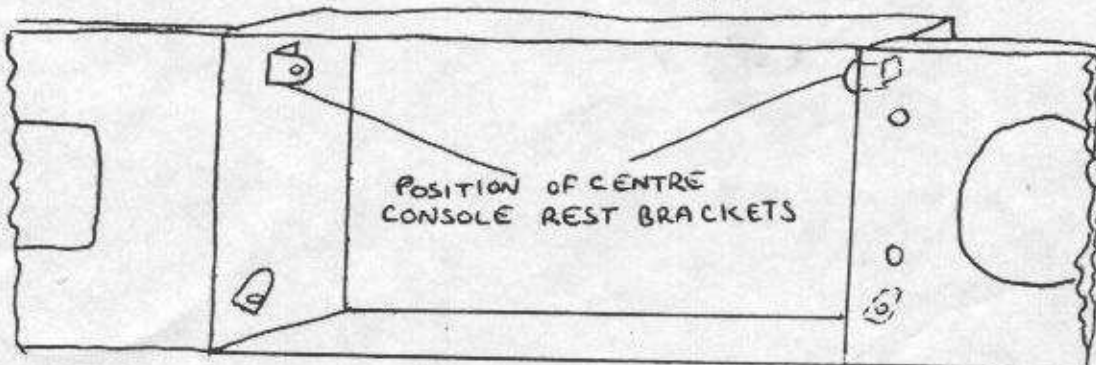
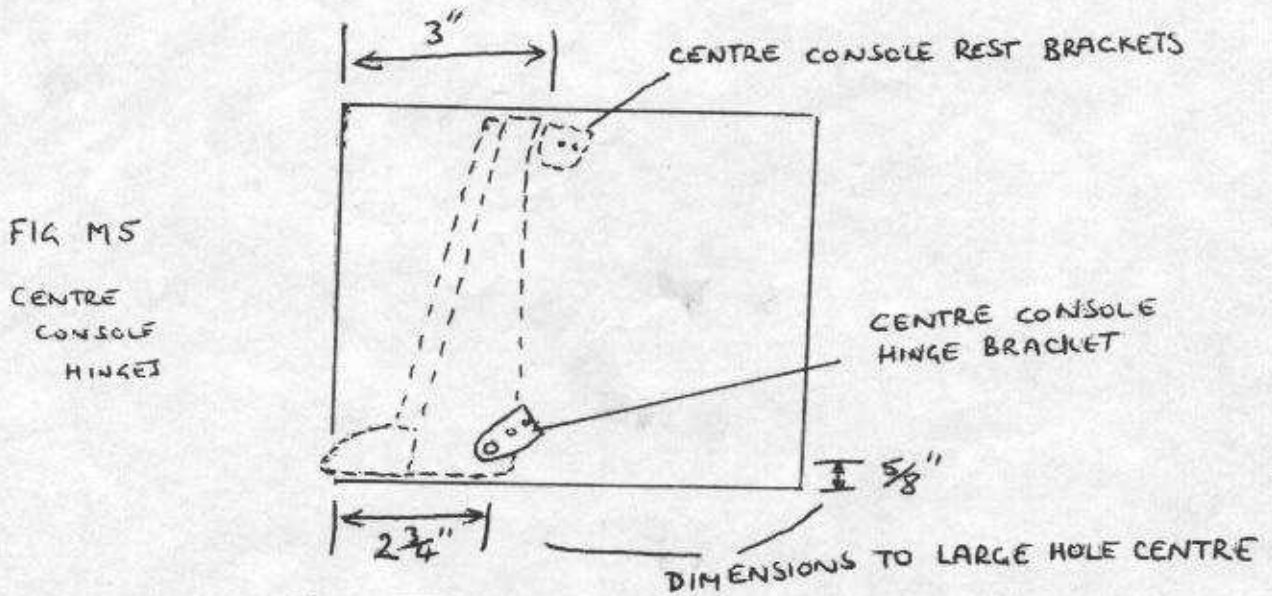
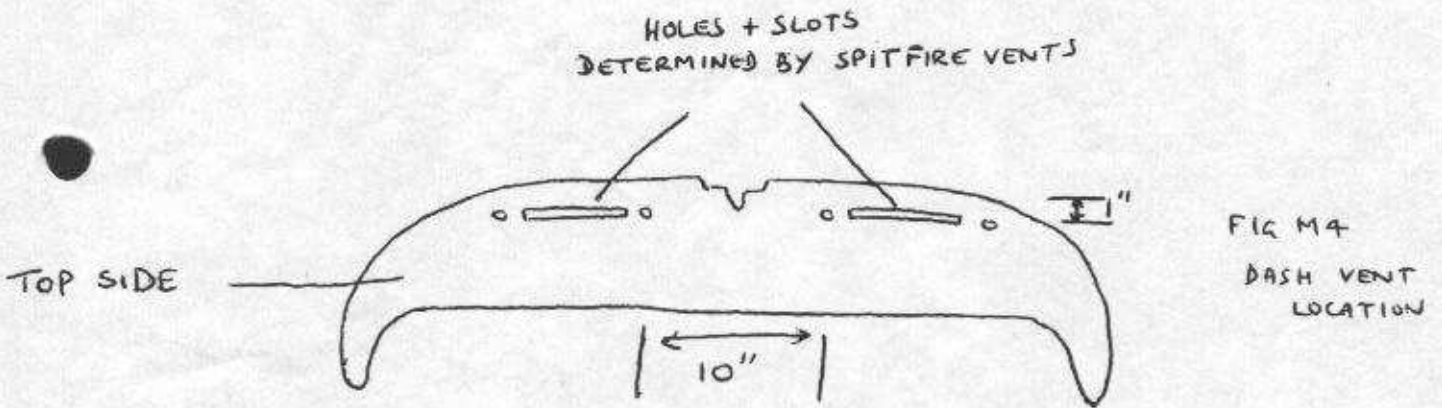
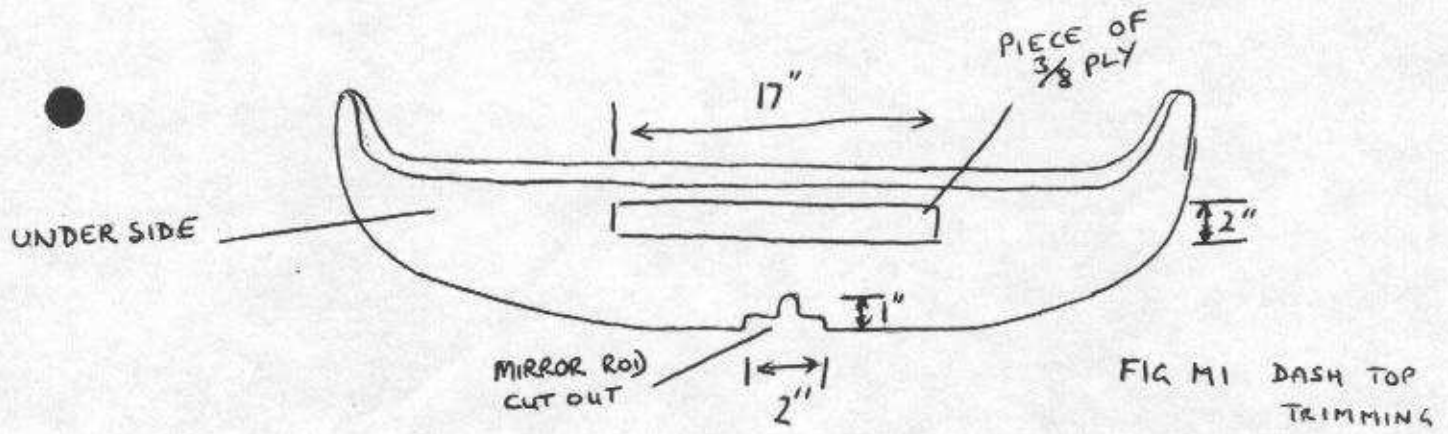
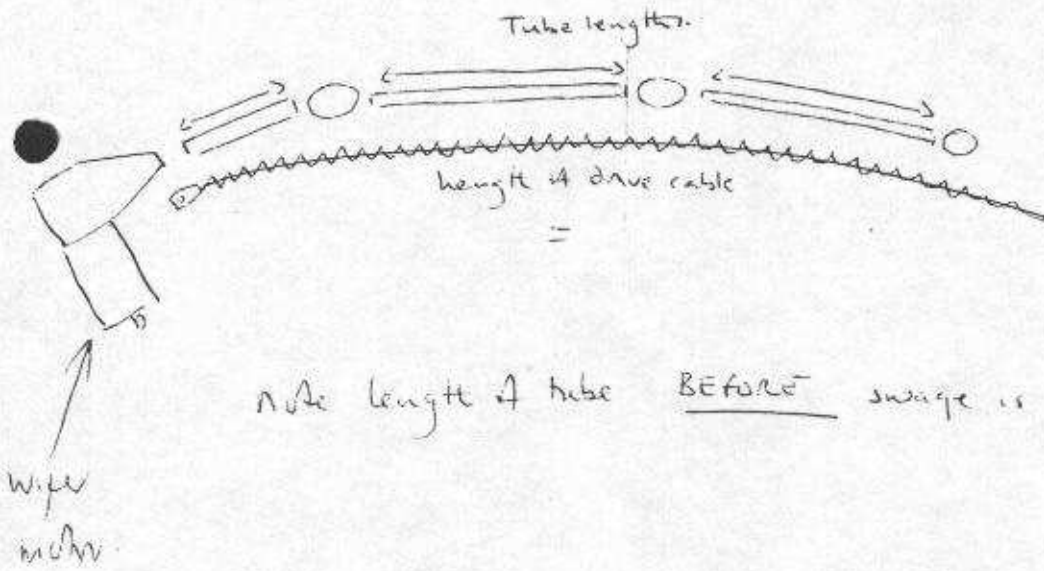
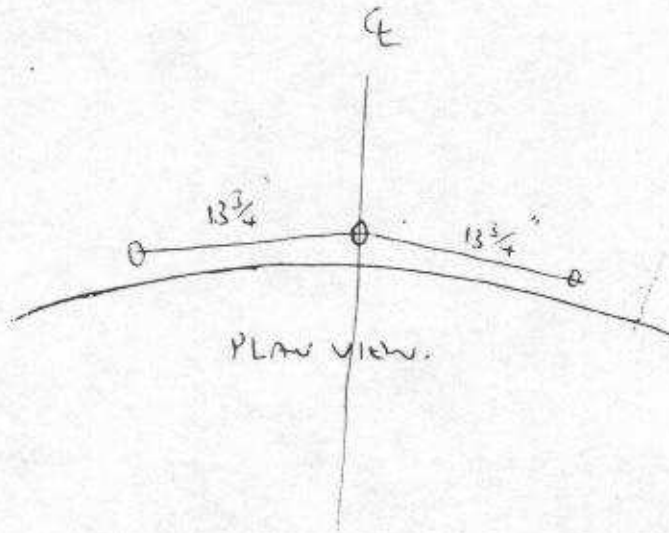


FIG. L14



3 WIPER SYSTEM.



Note length of tube BEFORE swage is put onto ends

FIG. M2.

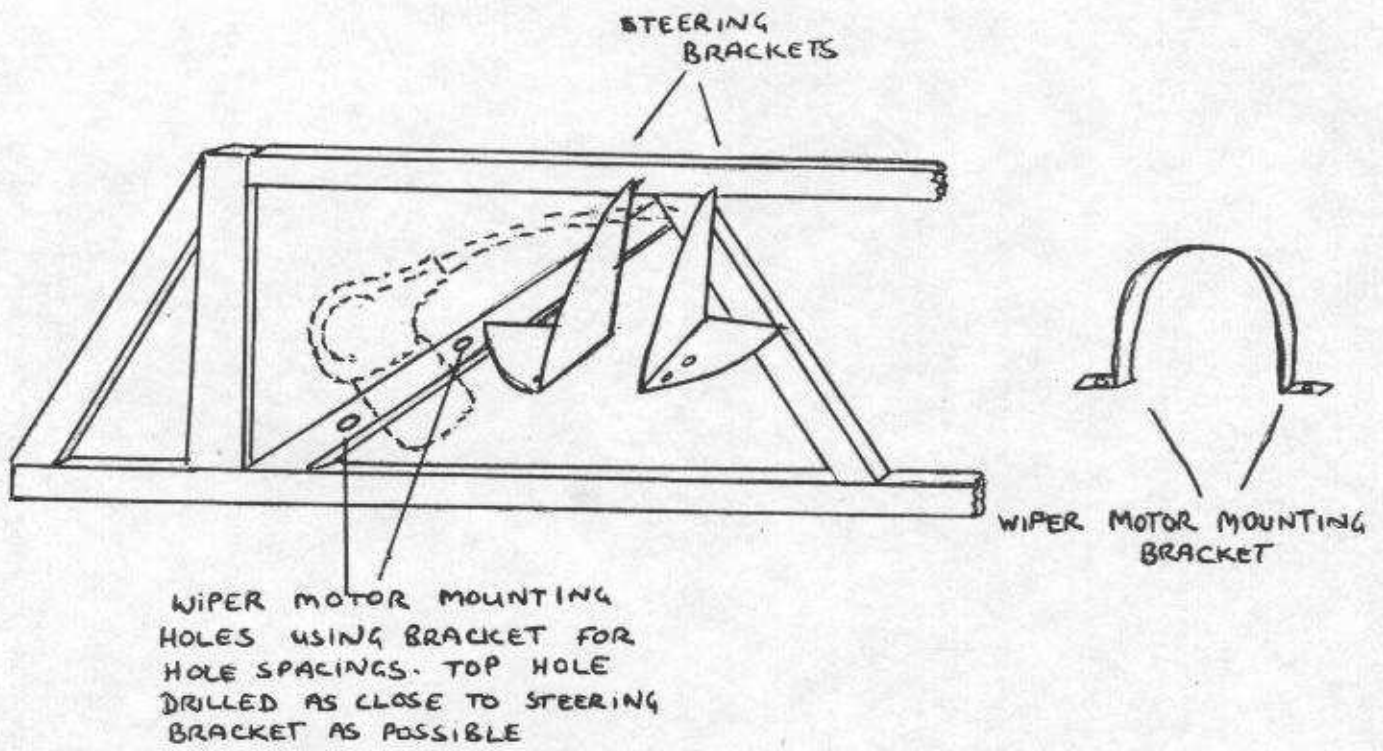


FIG M3

WIPER MOTOR MOUNTING

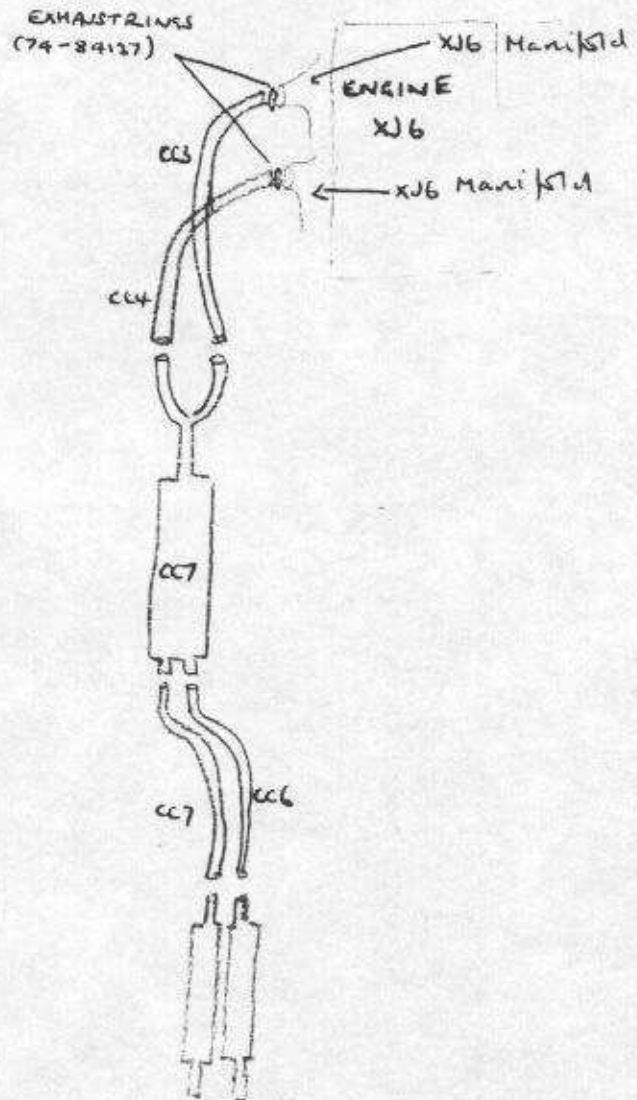


FIG N3

EXHAUST SYSTEM
(FACTORY - STAINLESS STEEL)

POSITION OF HEATER

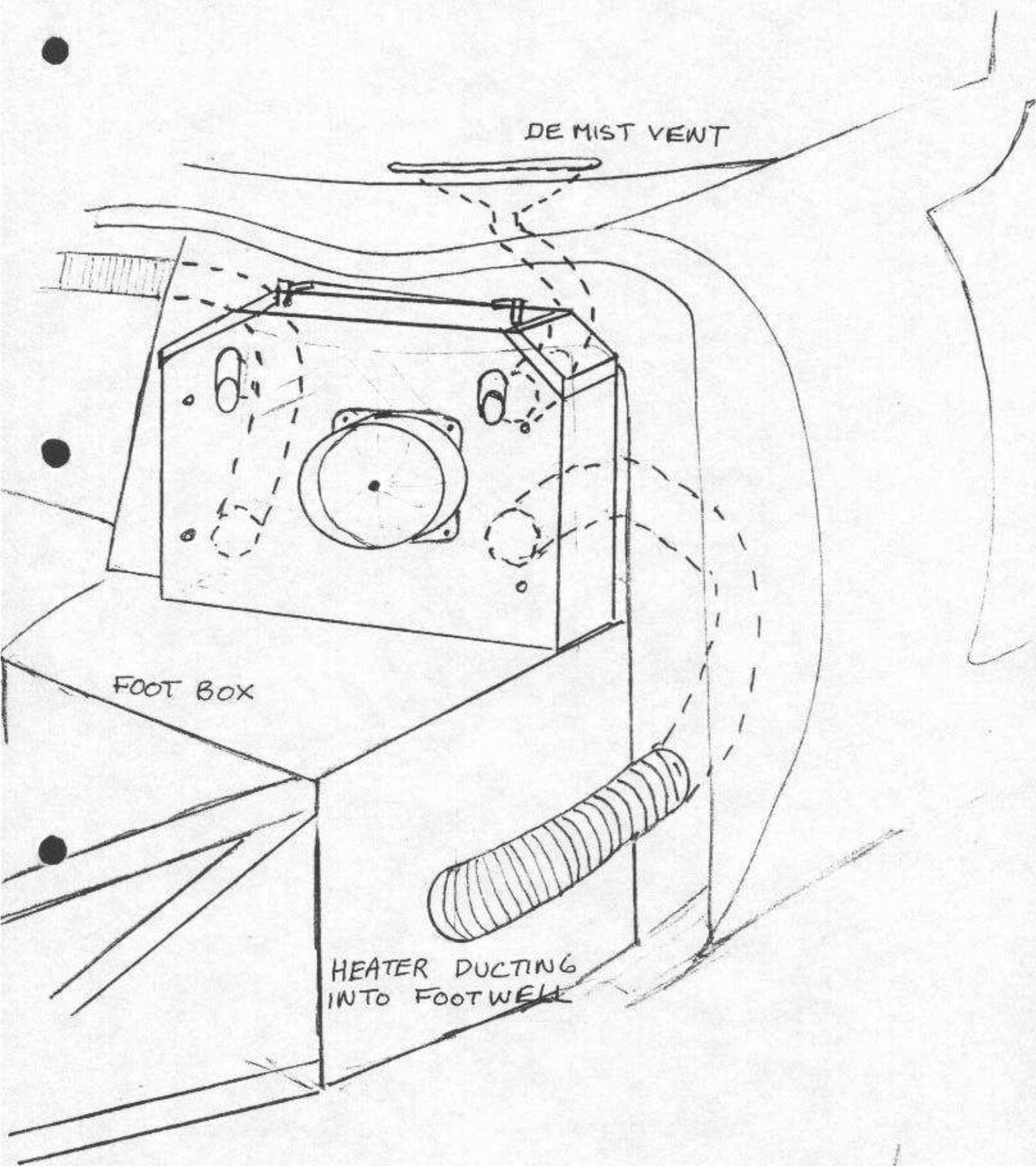
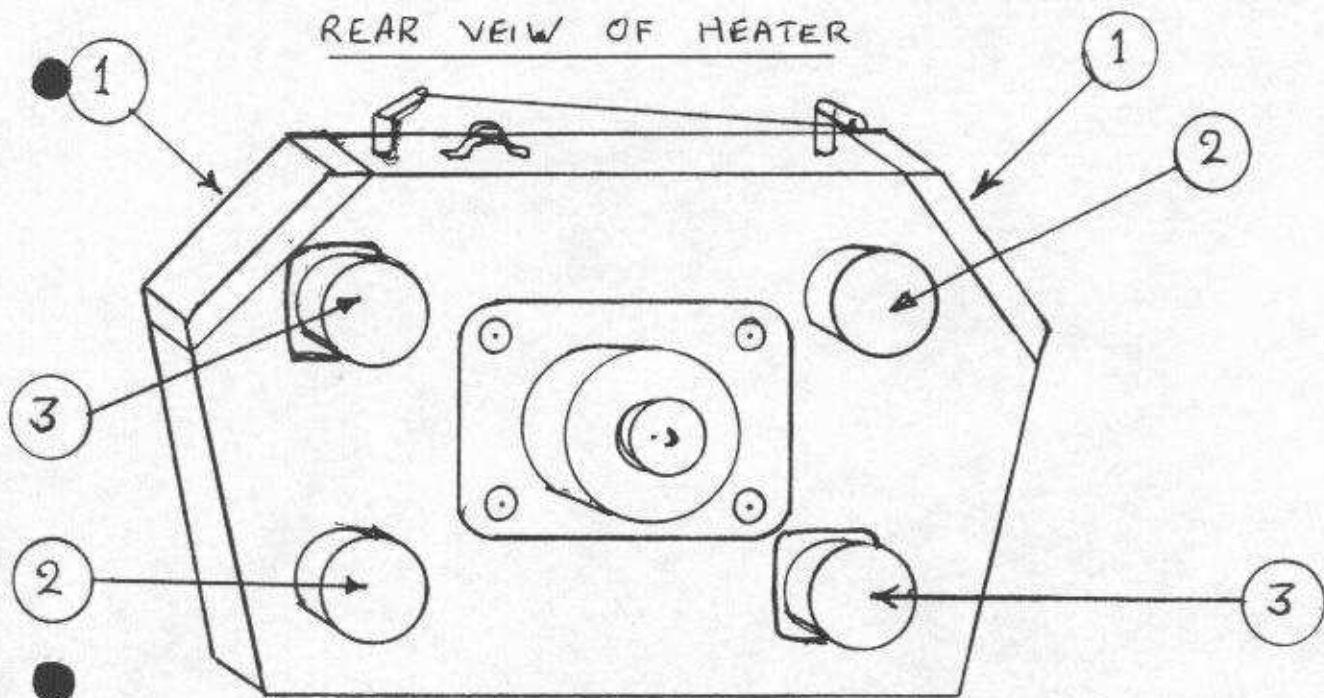


FIG M6

SPITFIRE TYPE HEATER MODIFICATION

REAR VIEW OF HEATER



① — MAKE UP AND FIT ALLOY CAPS TO BLANK OFF ORIGINAL HEATER OUTLETS

② — EXISTING DEMIST OUTLETS

③ — ADDITIONAL OUTLETS.
CUT $1\frac{1}{2}$ " DIA HOLE IN CASING AND FIT
 $1\frac{1}{2}$ " OD OUTLET PORT (KL N° PO 2687)

FIT 3" INLET PORT TO INLET AND DUCT
TO FRESH AIR

FIT $1\frac{1}{2}$ DUCTING HOSE FROM OUTLETS
TO DEMIST VENTS AND FOOT WELLS

FIG M7

FIG 02 Outer Seat belt mount

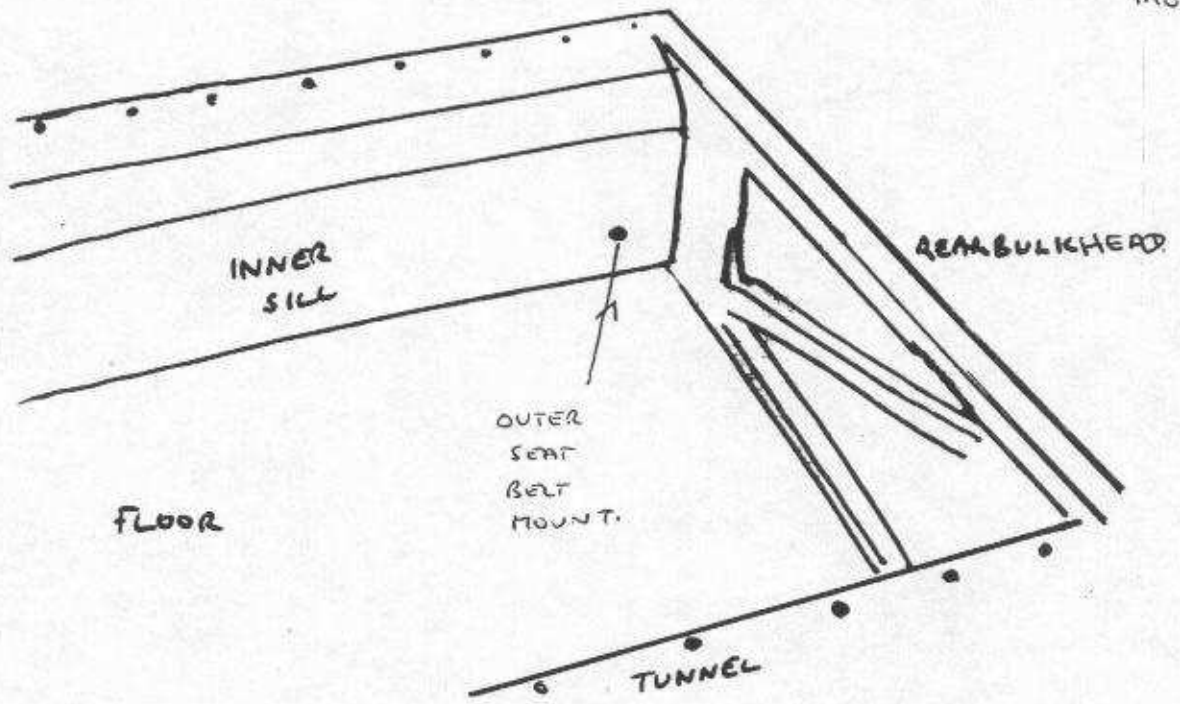


FIG 01 - Inner seat belt mount

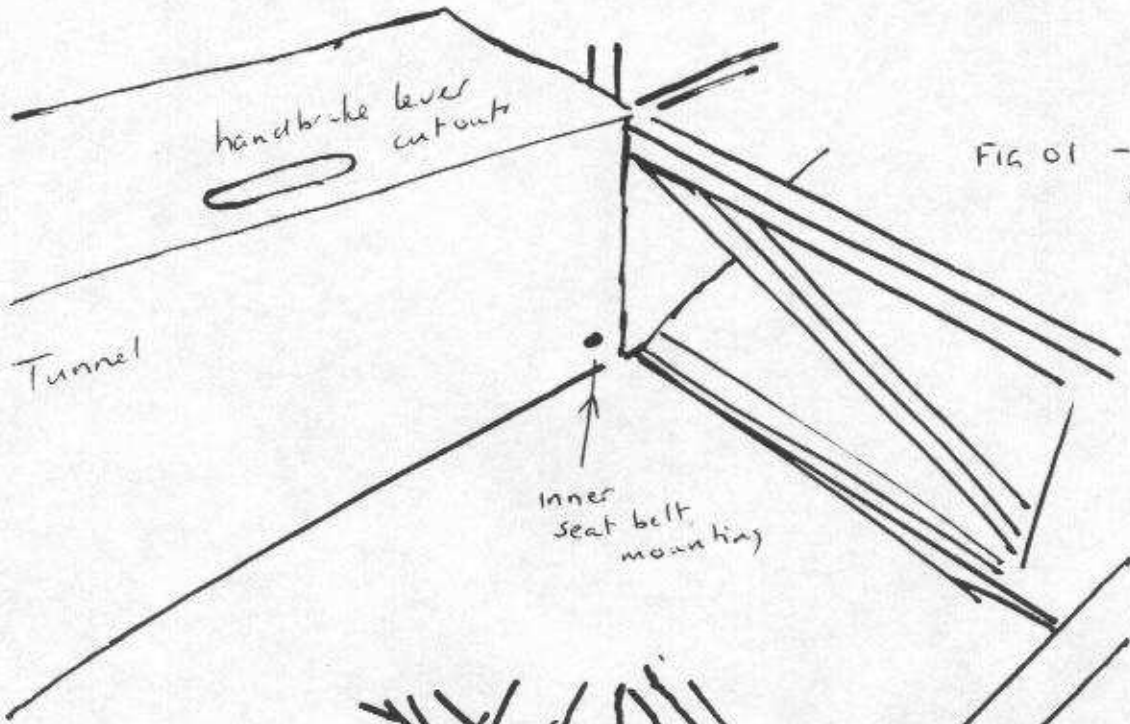


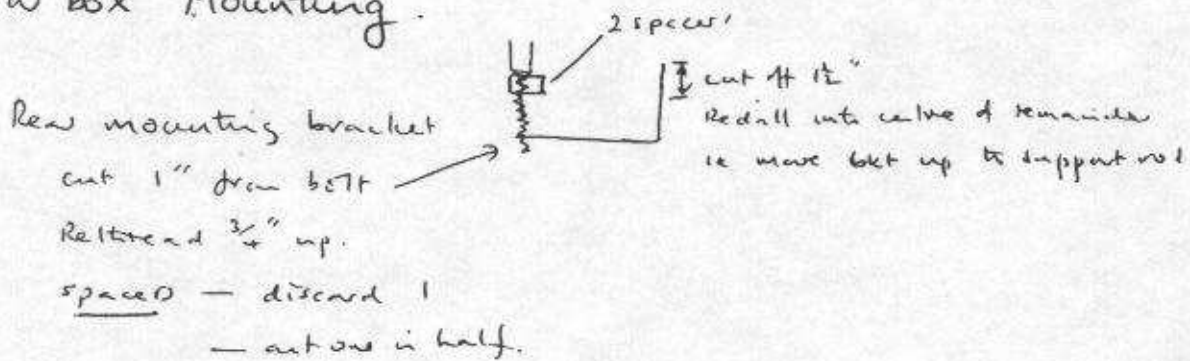
FIG 04. STEERING COLUMN MOUNT



Footbox showing cutouts for pedal box
(note LEFT HAND DRIVE SHOW)

Automatic Gearbox. B/W 65.

Gear box Mounting.

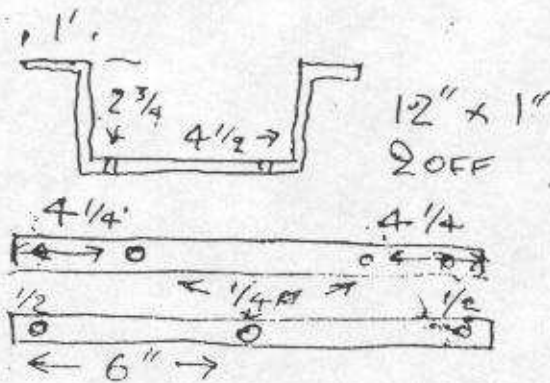


HTM per manual. (apart from retread)

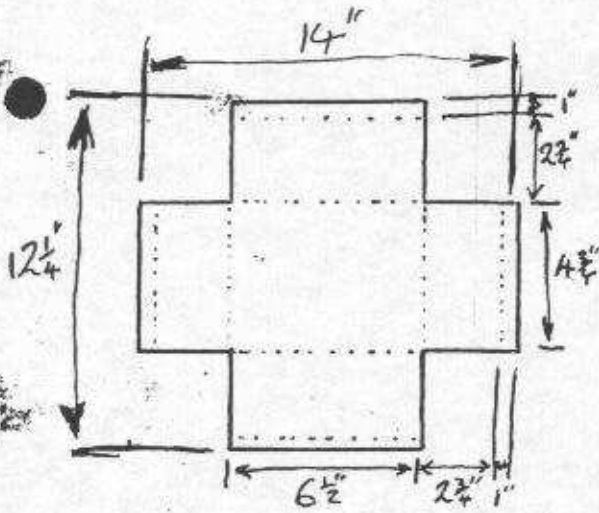
Run oil pipes down LH side 4 eye/box 4' long
 bend to pattern (Knife)

Gear change bracket / box assembly.

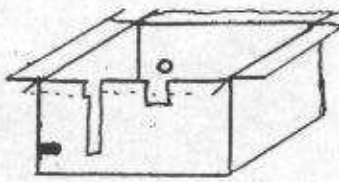
GEAR CHANGE BRKT



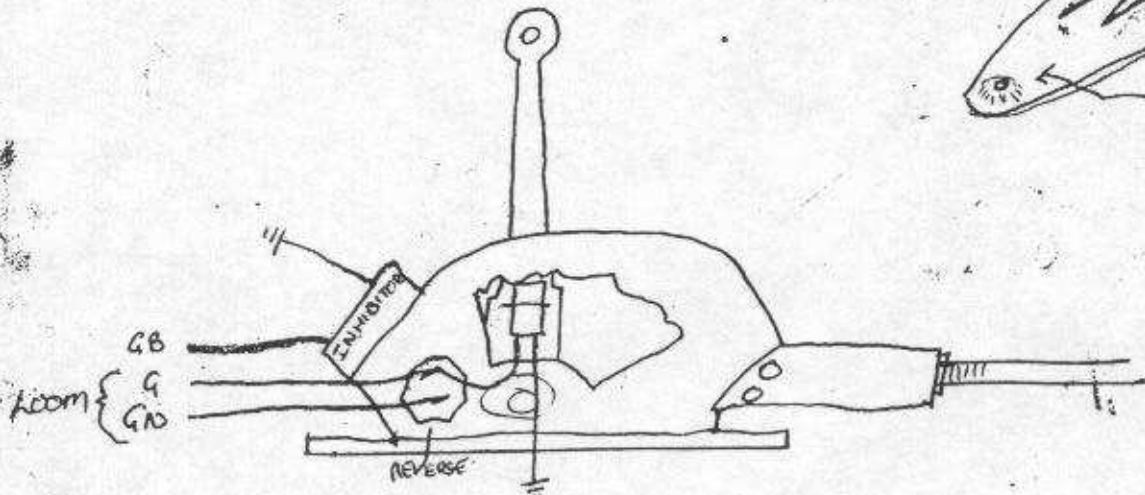
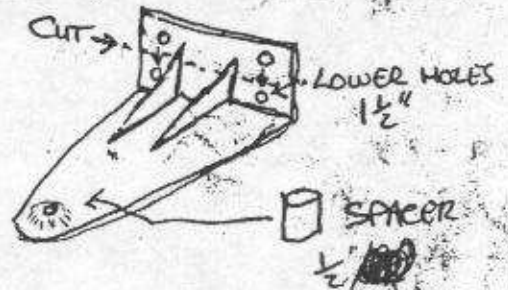
AUTO SELECTOR BOX



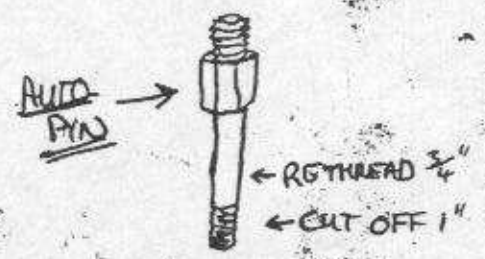
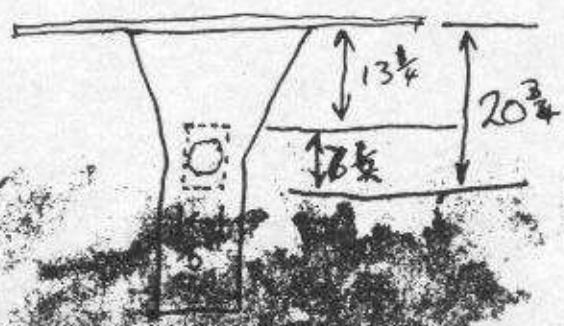
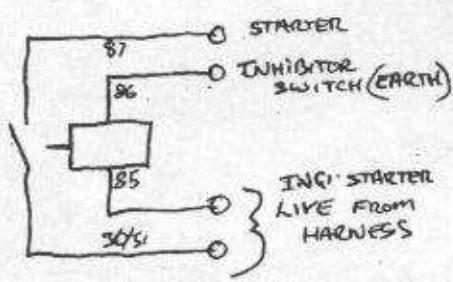
FOLD ALONG DOTTED LINES (FOLDING THE 1" FLANGES FIRST) CREATING A BOX WITH EXTERNALLY FACING FLANGES. ONE END OF THE BOX MUST BE SLOTTED SO CABLE AND BRACKET CAN COME OUT. THERE MUST ALSO BE A HOLE TO ALLOW WIRING TO BE PASSED THROUGH AT THE OPPOSITE END TO THE SLOTS



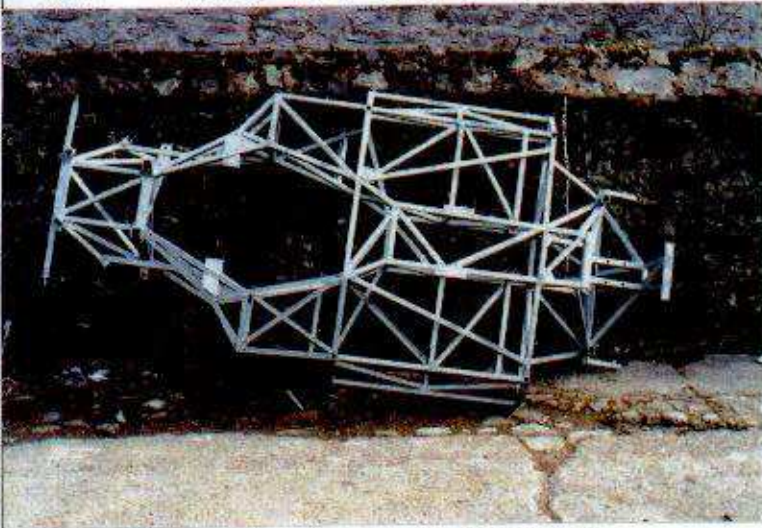
AUTO BOX REAR MOUNT



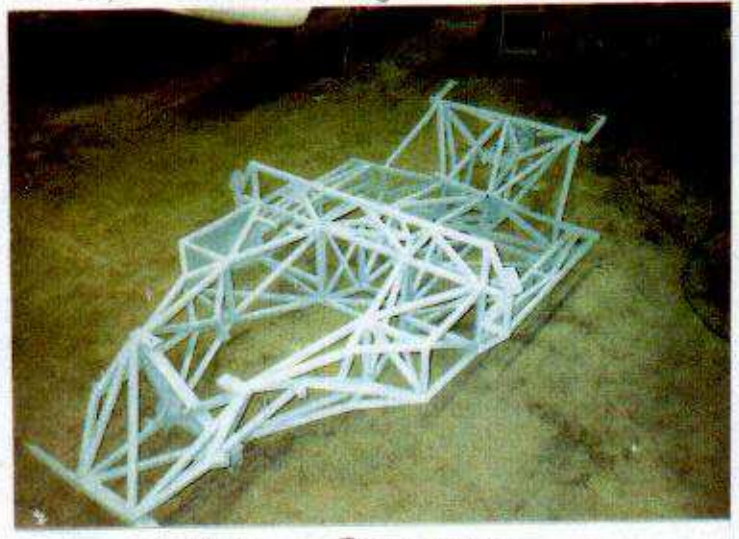
JOIN ~~85~~ 85 AND 30/51 TOGETHER FROM SAME WIRE IN HARNESS. 86 GOES WITH REVERSE WIRES TO INHIBITOR SWITCH ON SELECTOR. 87 LINKS BACK INTO HARNESS GOING TO STARTER SOLENOID.



A3 Mark 2 Ford/Rover chassis



A4 The Costin Jaguar chassis



O3 Self belt mounts (rear top)

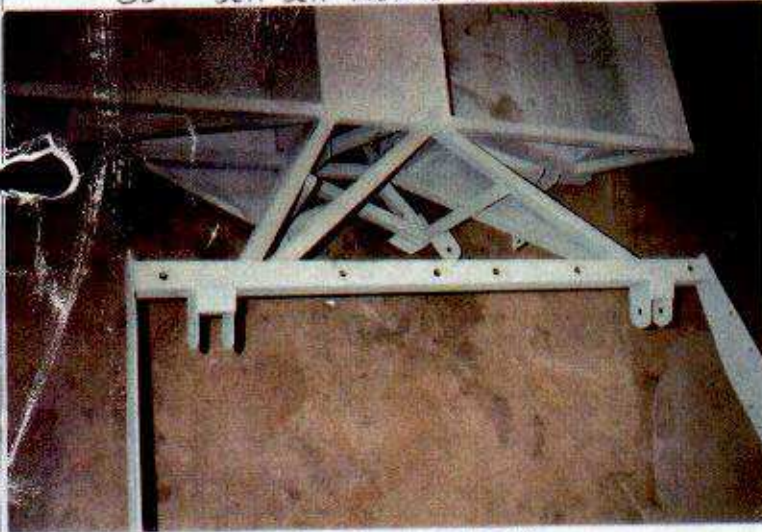
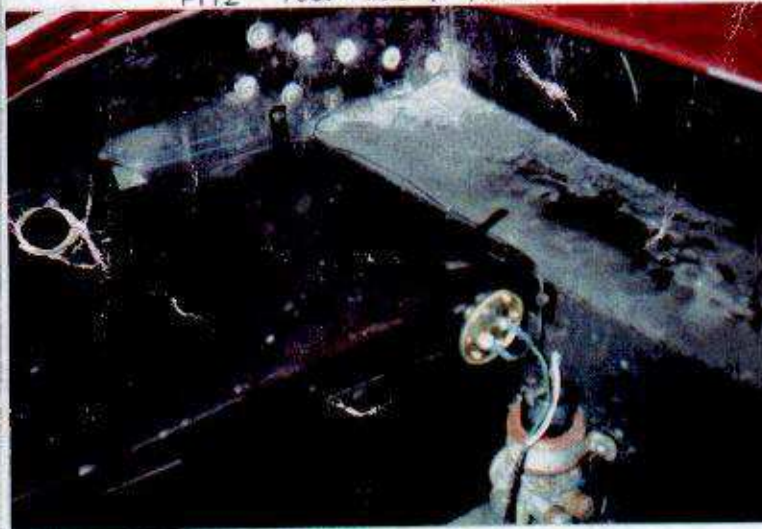


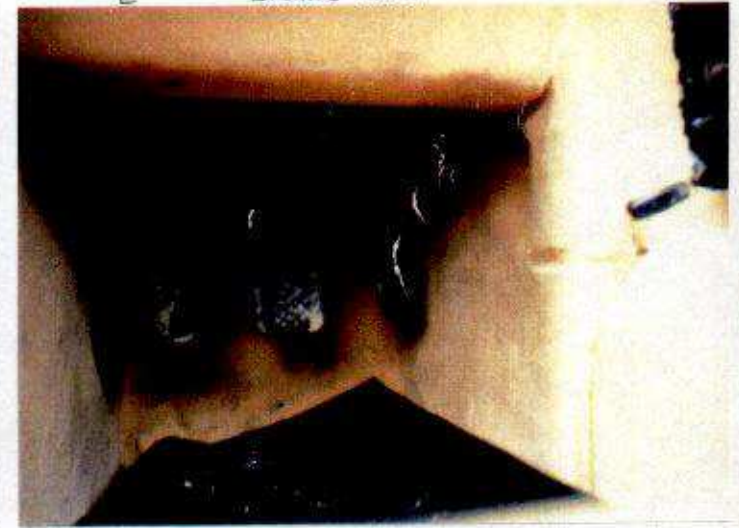
FIG H1 ENGINE MOUNT



F112 FUEL TANK + PUMP



E ENGINE MOUNT

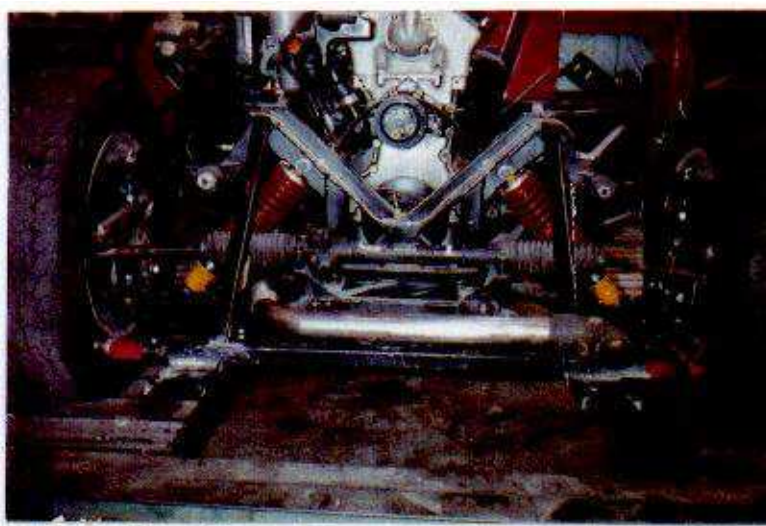


DASH + CENTRE CONSOLE

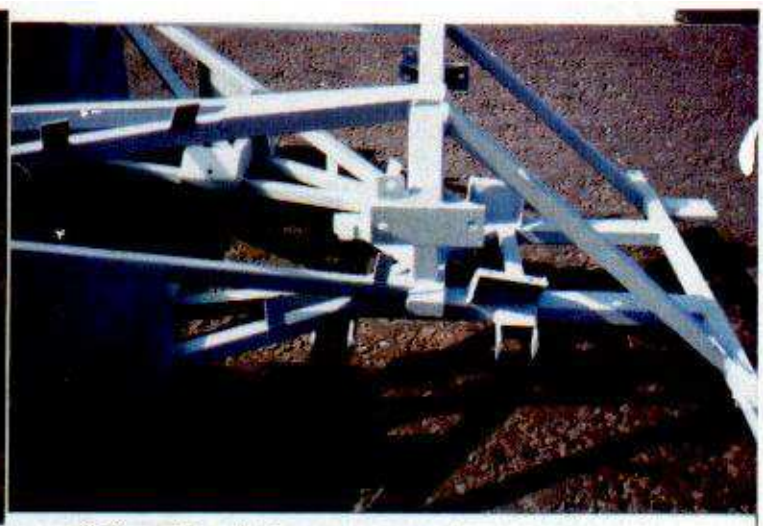


DOOR SEAL

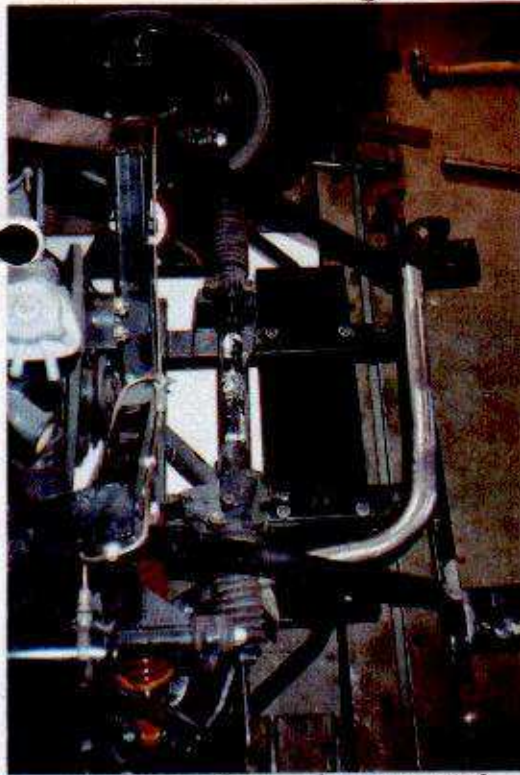




C2 - General arrangement

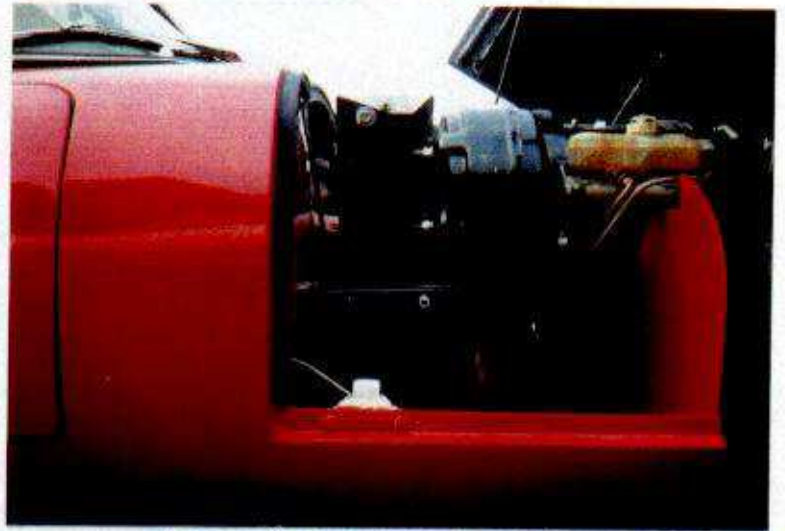


C3 Front Suspension pick ups

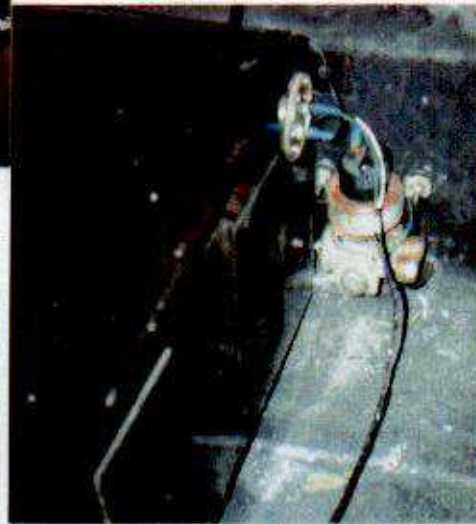


C7 | Roll bar / lower rad. pi

I2 Radiator he rods / electric fan

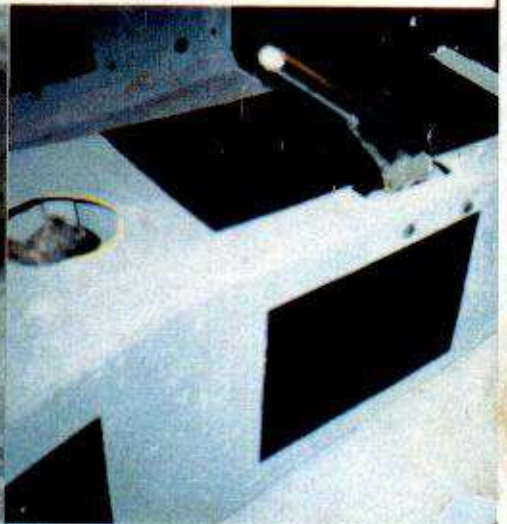


E1 Brake servo and master cylinder



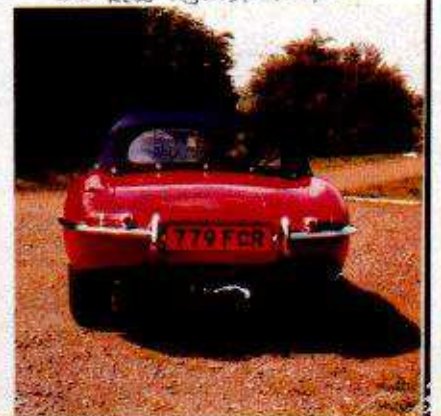
F1 | FL Fuel tank and pump

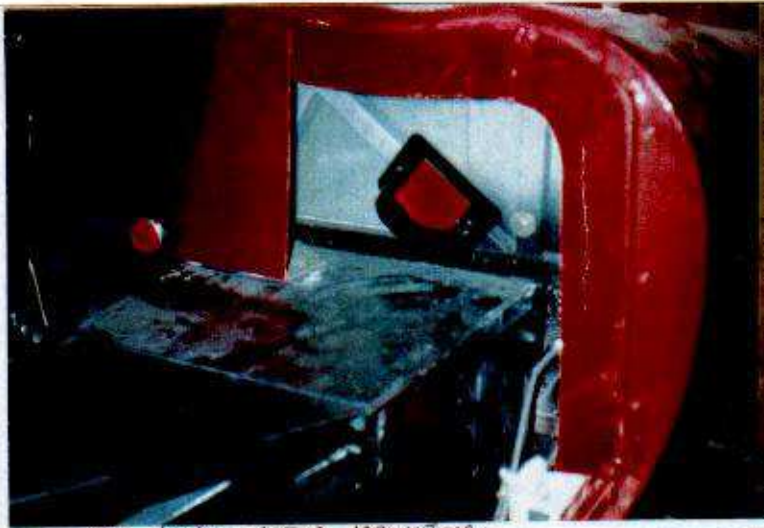
G1 H/LIGHT chrome / fibrous rock



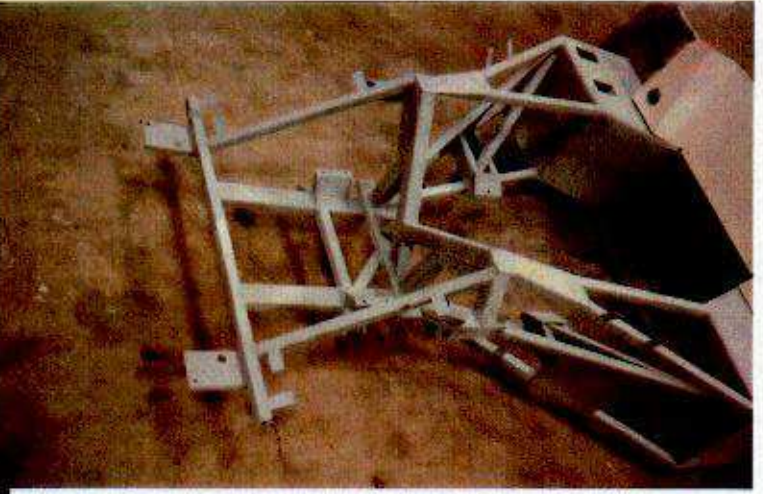
E9 Hand brake mounting

d2 Rear lights / lump part





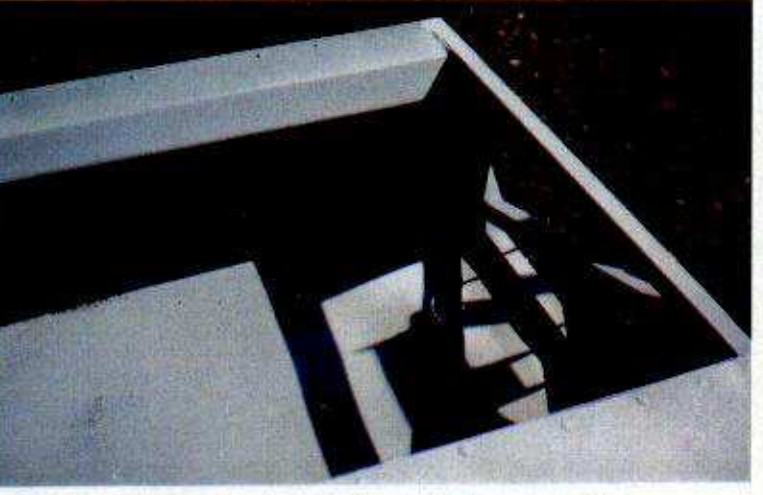
M5 Wiper Motor Mounting



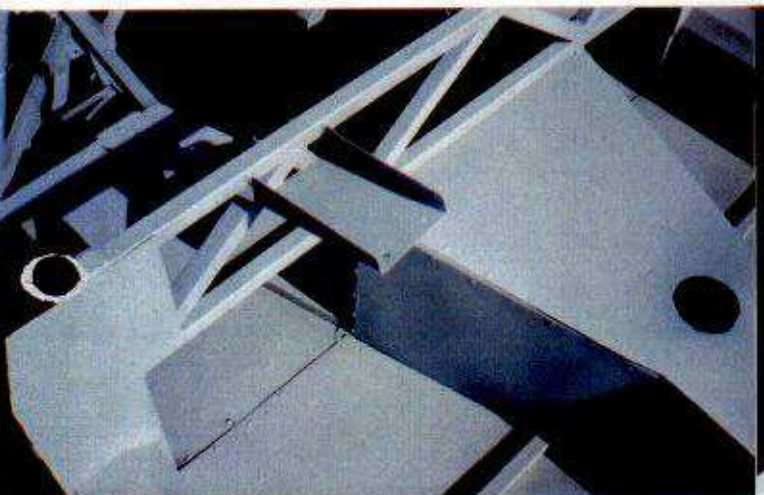
I1 - Radiator chassis mounts



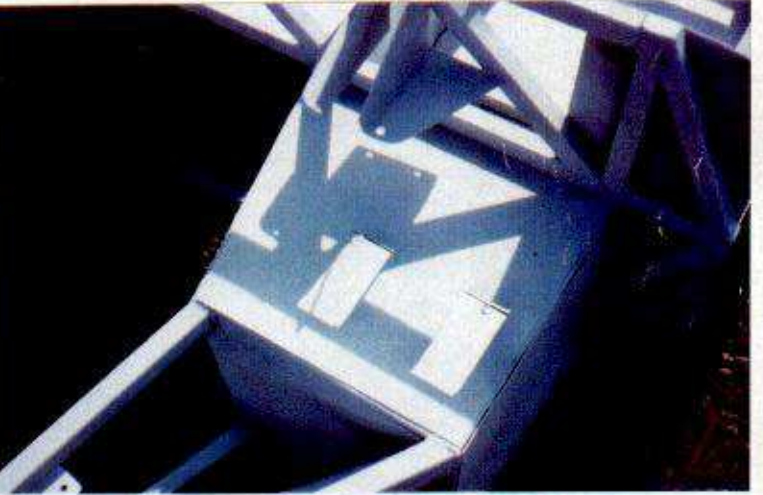
O1 - Inner lower seat belt mount



O2 - Outer lower seat belt mount



G4 Steering Column Mounting



G4 Steering column mounting



D3 Lower rear cage mounts



G1 - Steering Rack Mounts (see also O2/C7)