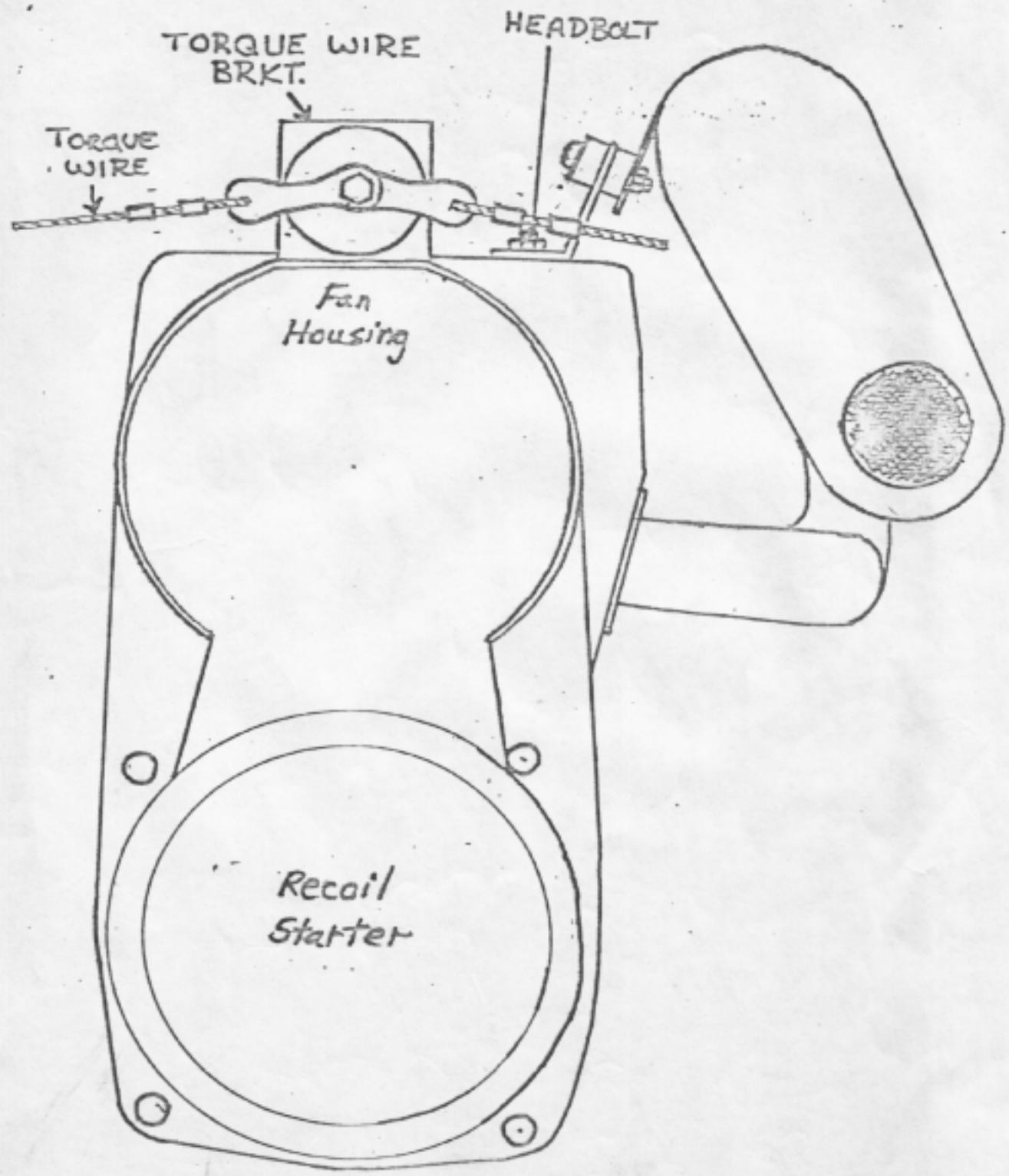
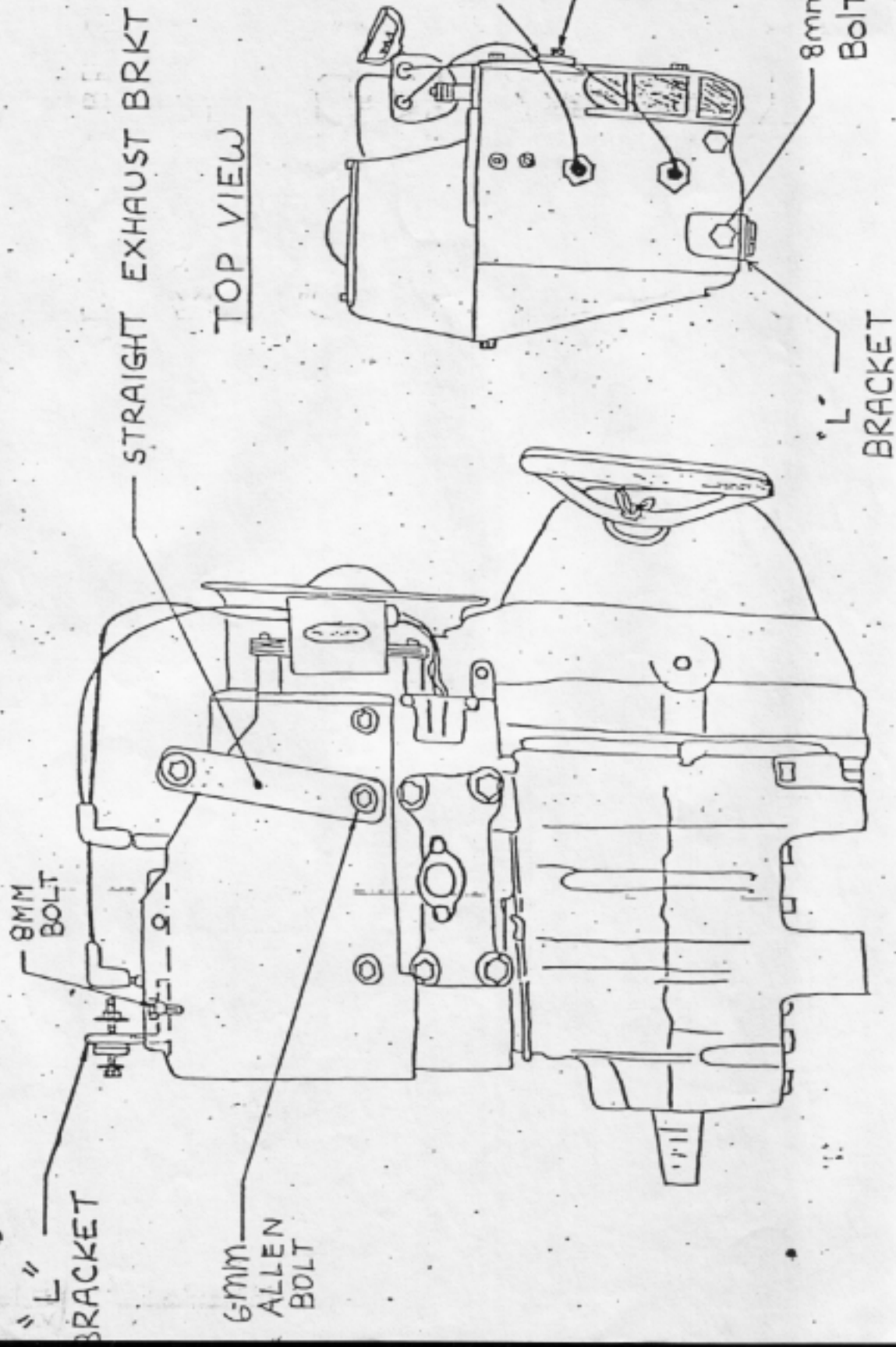


# CUYUNA - TORQUE WIRE AND EXHAUST MOUNTING

EXHAUST BRACKETS BOLT TO THE OUTER HEAD BOLTS



# EXHAUST BRACKET MOUNTING



C. Engine Lubrication

We recommend only standard petroleum base two cycle oil to be mixed at a maximum of 20 to 1 ratio as to oil. Any deviation from this is done at owners or dealers responsibility.

We do not recommend any synthetic base two cycle lubricants and will not assume any responsibility for engines seized from its use. We have had at least two instances of engines seriously damaged from use of a synthetic lubricant mixed at a 100/1 gas to oil ratio.

The oil manufacturers specifications stated that this was acceptable, we do not agree. Deviations from this requirement should only be done when approved in writing from Engine Manufacturer. We at Ultralight will not assume responsibility for any deviation.

7. BELLCRANKS

Regular inspections should be made of control bellcranks. It is possible that over a period of time when the aircraft is exposed to severe control movements, bellcranks may become deformed, causing reduced control deflections

Extreme cases may even cause fatigue and possible fractures. If deformation or even slight stress fractures are discovered removal and replacement must be made with factory stock replacement parts.

NOTE: A service bulletin number 3 has already been sent out in regards to elevator bellcranks need for additional support by addition of an AN3-1A bolt.

8. NYLOCK NUTS

It has come to my attention that some misinformation has been disseminated about the reusability of an aircraft self locking (nylock) type nut. Recently, an ultralight aircraft pilot lost his life because of continued reuse of a nylock. We are pleased to say however, that this unfortunate mishap did not occur in a Mirage ultralight.

The nylock insert nut which is threaded on to a bolt becomes less effective each time it is removed and replaced. In this instance it is determined that the nut was reused at least twenty times. In flight the nylock unthreaded because of vibration and fell off. Once off, the bolt fell out and a wing was lost. We recommend that maximum reuseability of a nylon insert nut to be limited to three times. If because of your frequent disassembly of your Mirage, you determine that an area that uses a nylock nut should be replaced you can change the undrilled bolt with a drilled bolt to be used with a wing nut and safety pin.

9. BOLT REPLACEMENT

If in the owner/operators opinion, a bolt should be replaced this should only be done with a certified aircraft "AN" quality bolt. We use aircraft hardware for a reason. All bolts are specifically tested to very ridged standards. There have been many cases in which an unknowledgeable ultralight owner has replaced an (AN) quality bolt with what we call a hardware store bolt. These bolts may range in hardness levels from a grade 0 through grade 8. Even a grade 8 bolt which is of high quality, does not compare with the ridged standards of an (AN) bolt.

We at Ultralight Flight intentionally price our bolts at extremely low cost so that replacement with the proper bolt will be made and not avoided because of cost.

I do hope that this information will be of great assistance to you. Any questions can be directed toward dealers in regards to purchase of replacement parts to keep your Mirage in tip-top shape.

Sincerely yours,

*Franklyn J. Riley*  
Franklyn J. Riley  
President

ULTRALIGHT FLIGHT INC.



623 RIVER STREET  
BUILDING #19 - P.O. BOX 645  
WINDSOR, CONNECTICUT 06095  
(203) 683-2760

### KAWASAKI ENGINE OPERATION RECOMMENDATIONS

#### OIL & GAS

This 2-stroke engine requires its lubricating oil to be pre-mixed with gasoline prior to filling of gas tank, at a recommended ratio of 20-1, i.e. 1 quart of oil to 5 gallons of gas.

GAS - minimum octane rating 90 either leaded or unleaded.

OIL - any top quality 30wt 2 stroke oil mixed 20-1  
recommendations:

1. Kawasaki 2  
available at Kawasaki Motorcycle Dealers
2. Kawasaki Snowmobile/Jet Ski Oil  
available at Kawasaki Snowmobile and Jet Ski Dealers.

#### BREAK-IN

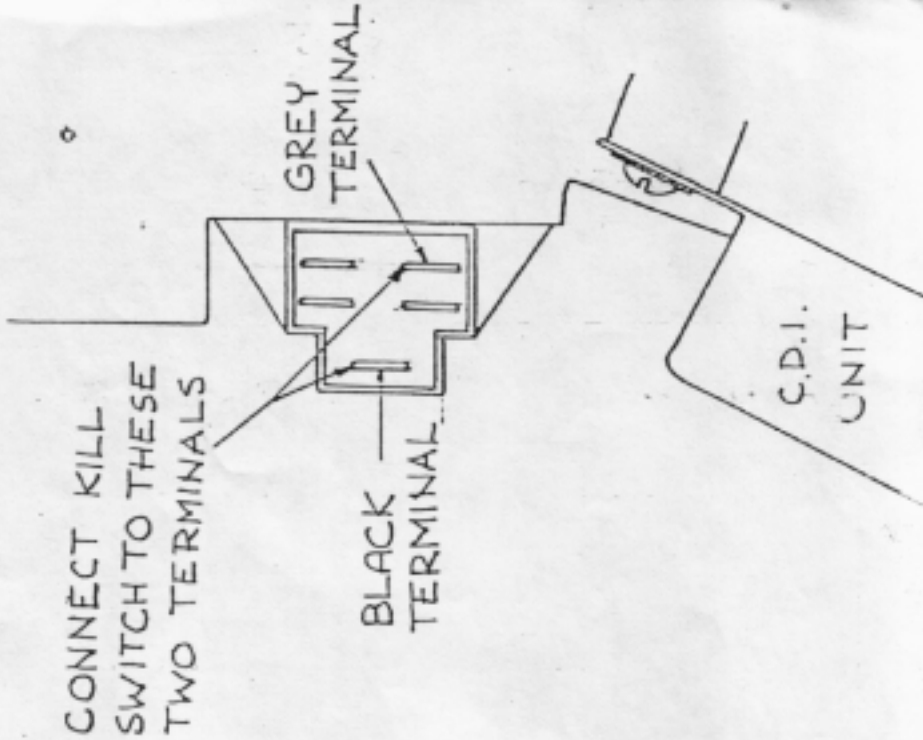
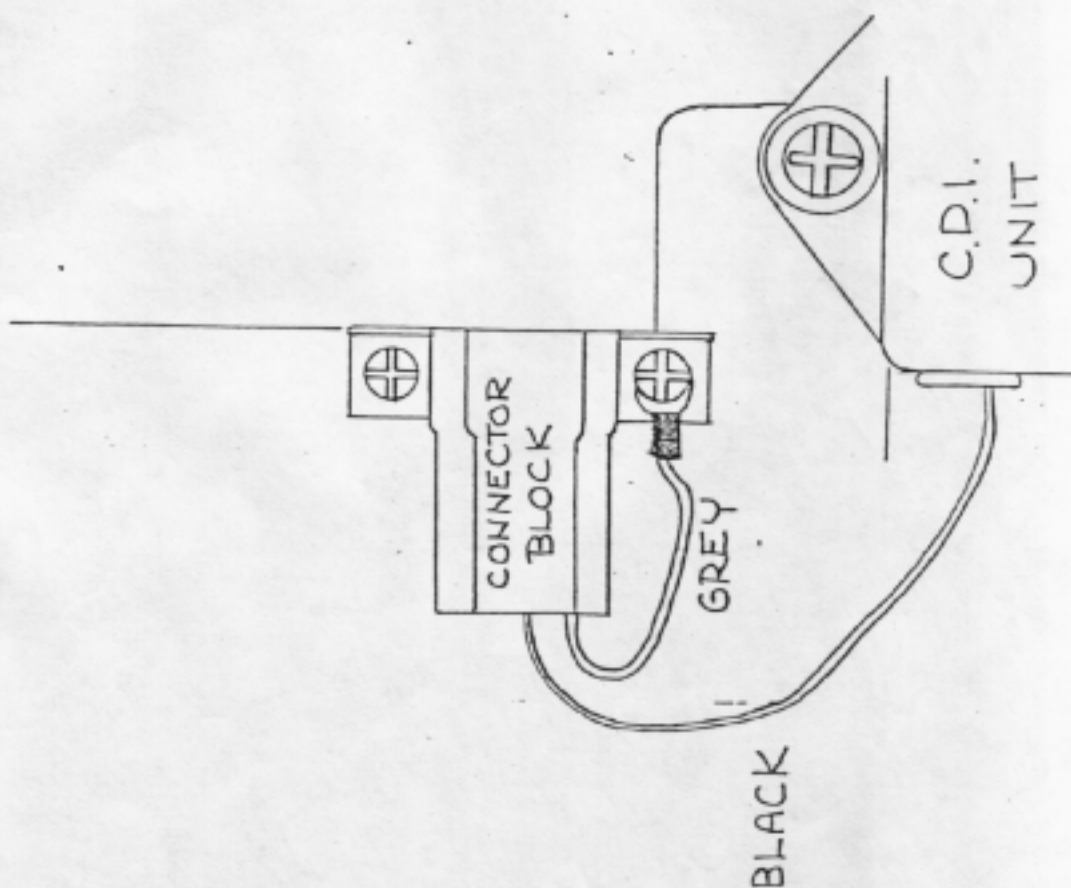
Limit first three flights to less than 10 minutes and less than full throttle operation - with 15-20 minute cool off periods in between each. At the end of each of these flights, we recommend removing spark plugs and inspecting - the inside porcelain section should be a tan to dark brown color, a very light brown or white color suggests too lean a carburetor setting-or-a carburation problem that should be repaired before flying again.

#### STORAGE

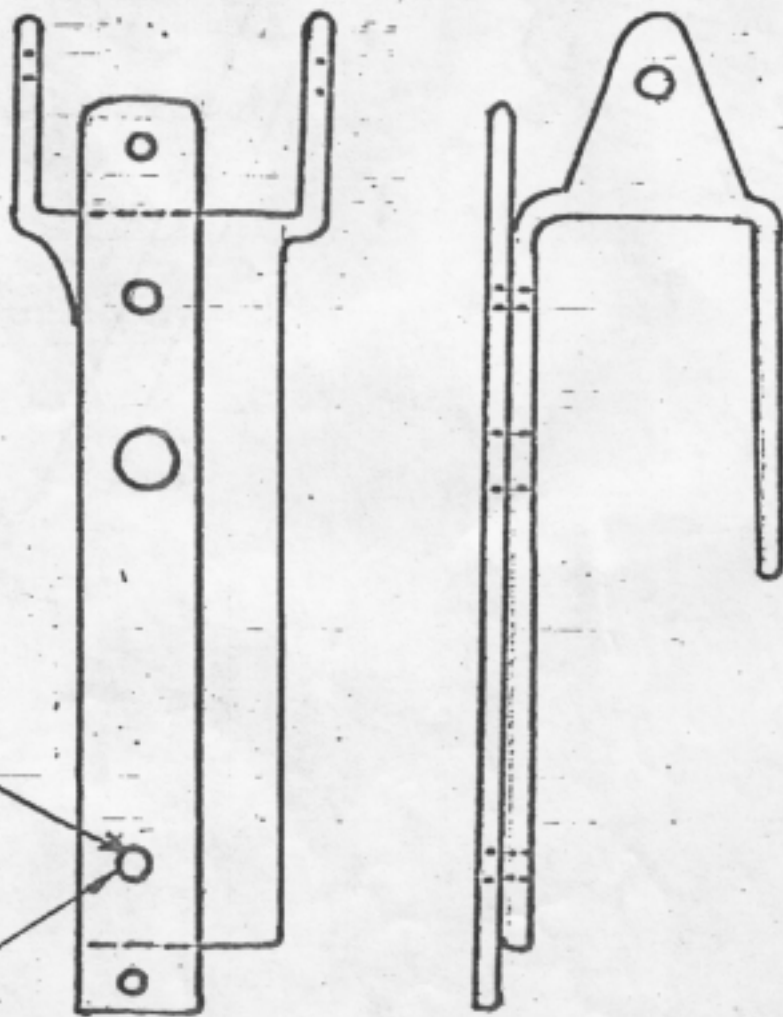
If unit is going to be unused for an extended period of time (6 months or longer) we suggest the following procedures be carried out to prevent engine damage from corrosion:

1. Add gasoline stabilizer to fuel tank (available at most hardware stores or lawn mower shops.
2. Run engine a minimum of 15 minutes
3. Remove spark plugs and pour several drops of oil (petroleum base, not synthetic) down each spark plug hole, turn engine over several times and re-install spark plugs
4. Cover both the carburetor and exhaust openings with a plastic bag

# KILL SWITCH WIRING



# CONTROL STICK MOUNTING BRACKET



NOTE: ELEVATOR BELCRANK AND/OR CONTROL  
STICK MOUNTING BRKT. MUST HAVE  
TWO  $\frac{3}{16}$ " HOLES. EARLY STYLES MAY 1)

Reverse Spoiler Pushrod

AN765-1032



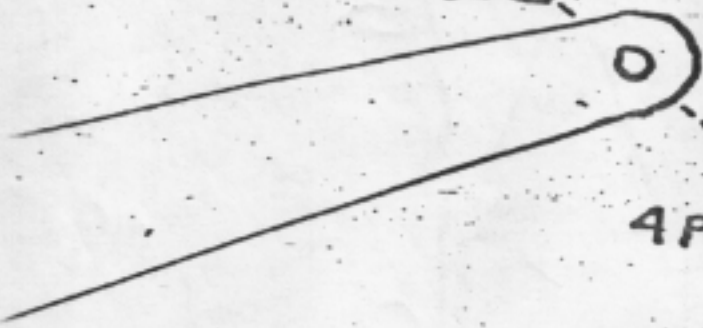
AN-42B-4A

4PW



AN3-5A

365-1032



SPOILER PUSHROD

4PW

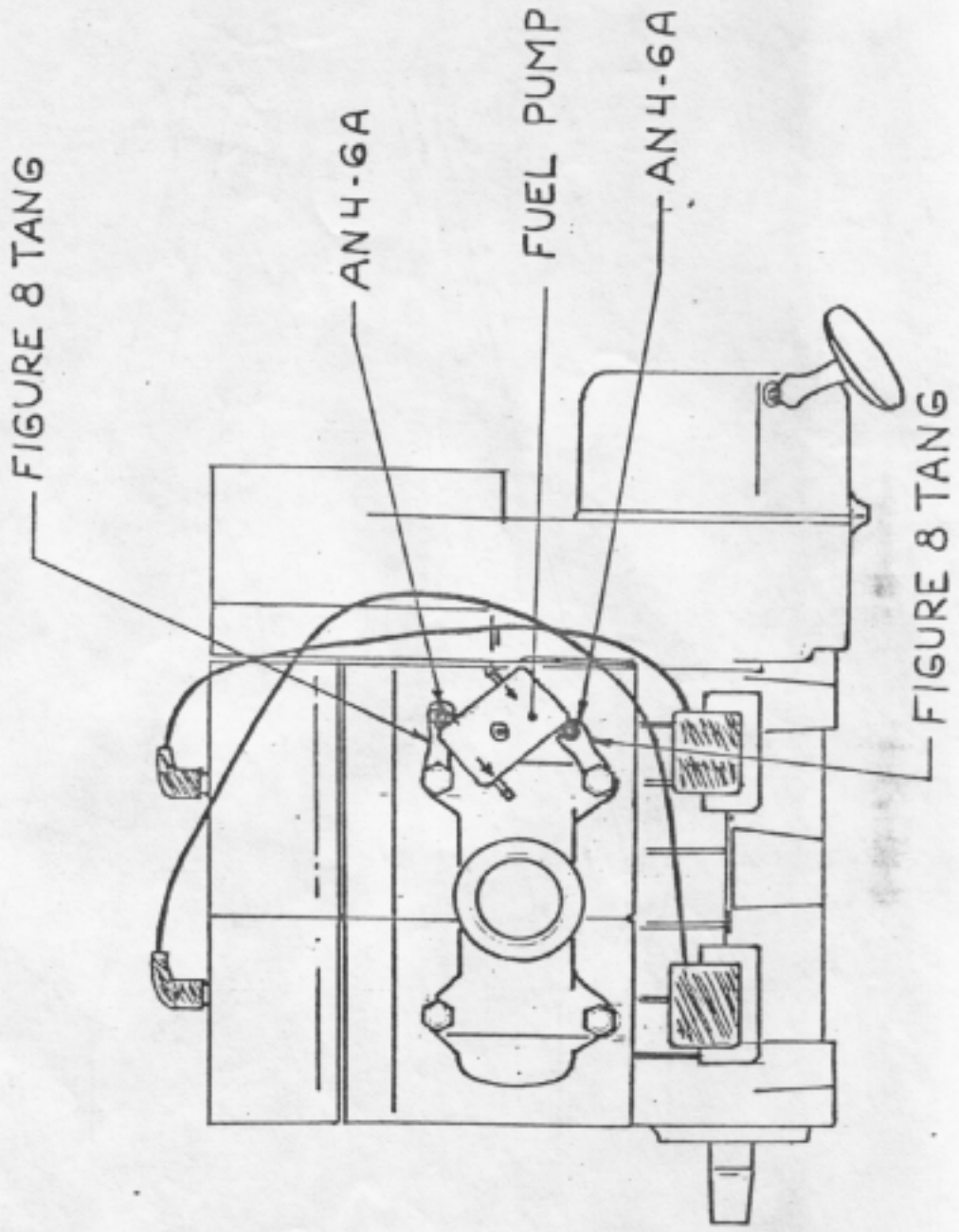


AN3-5A

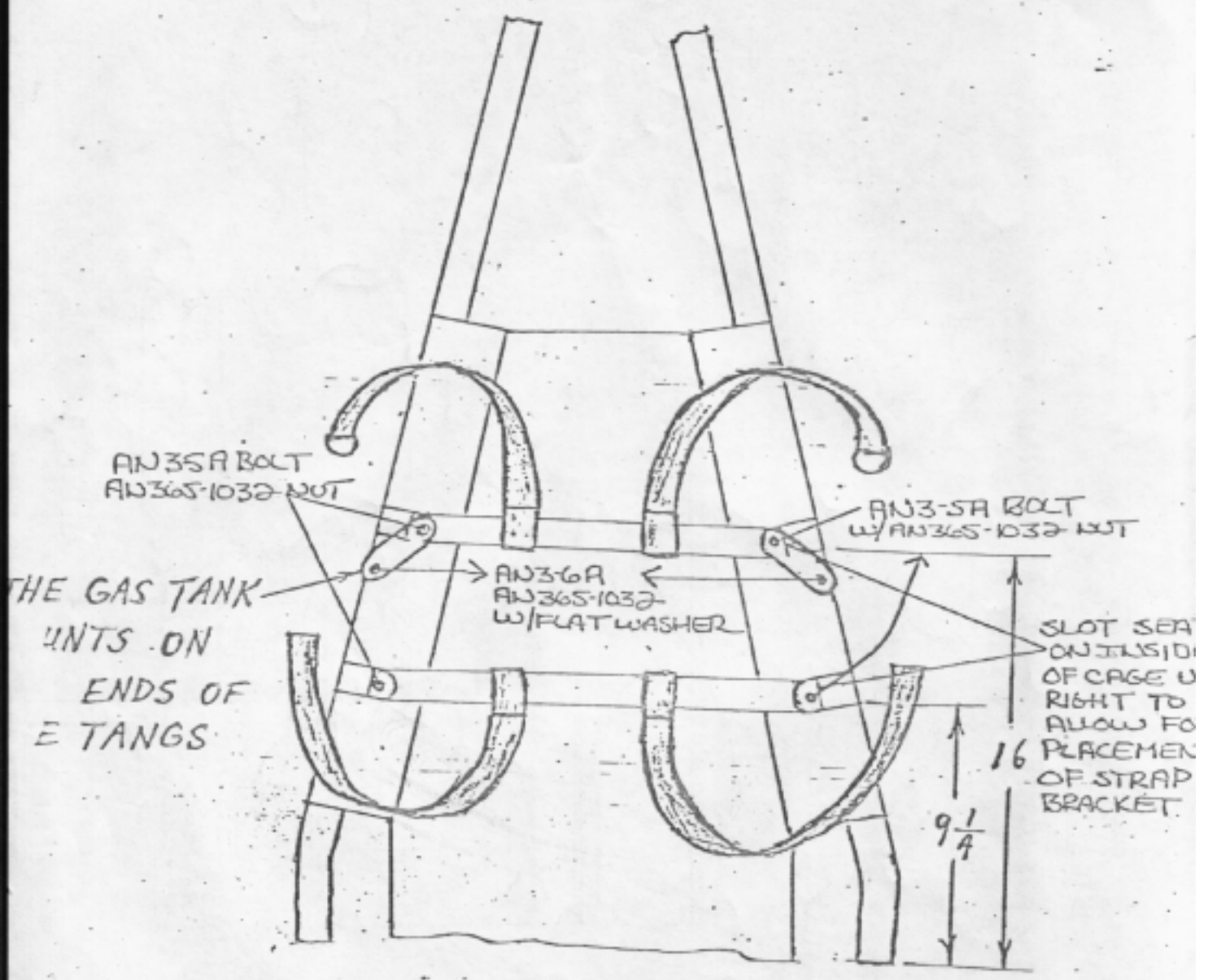


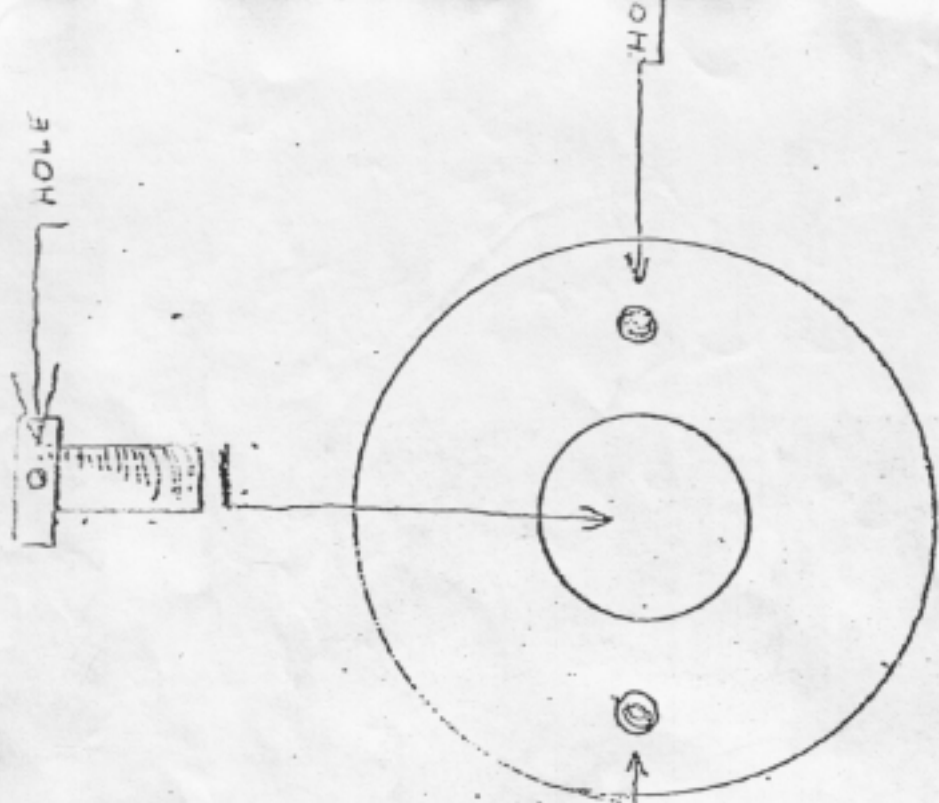


# FUEL PUMP MOUNTING

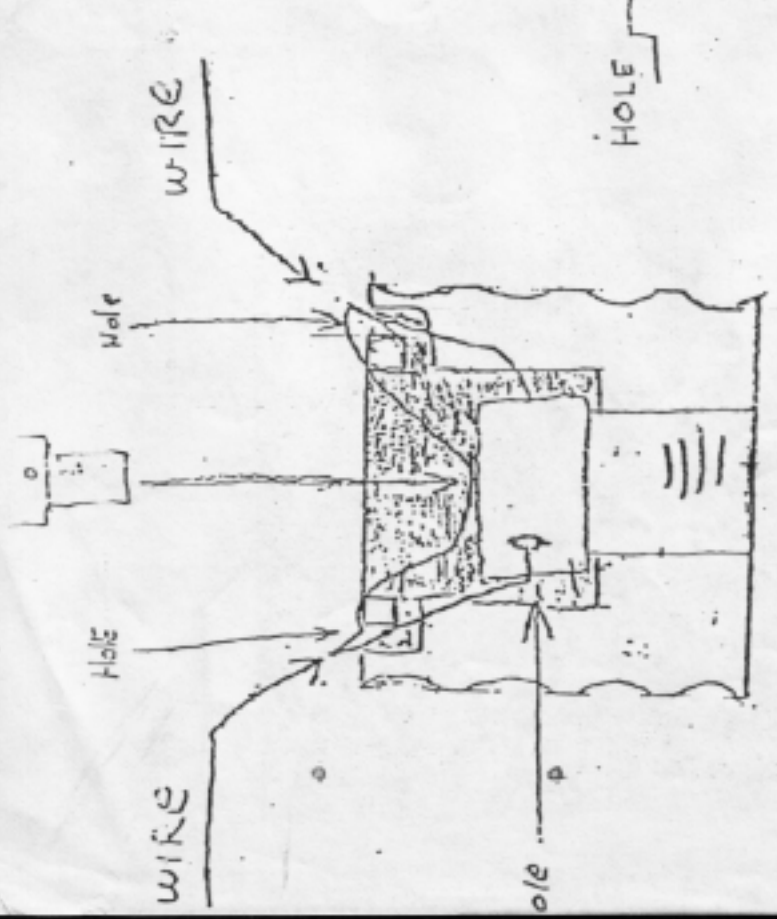


# SEAT BACK GAS TANK MOUNT





TOP  
VIEW



SIDE VIEW

SAFETY WIRE PULLEY AND  
FOR DRIVE BOLT

