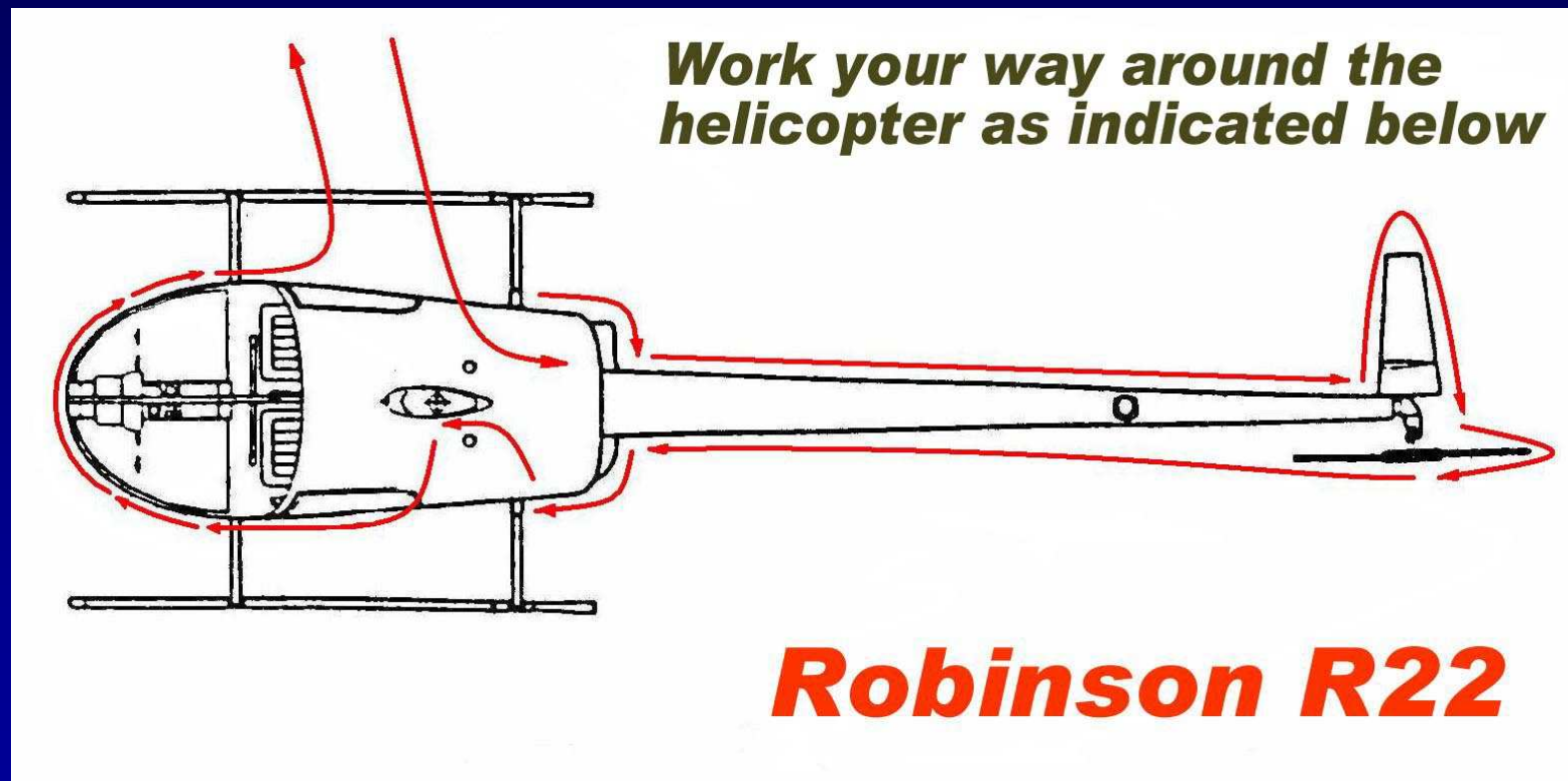


# ***R22 Check***



***Produced By NB***

## Αερολέσχη Δεκελίας



*This presentation is a training aid and is in no way designed to replace the Robinson R22 Pilots Operating Handbook. No responsibility can be taken for any injury arising from the use of this product.*

## Fwd Cowl Door

**Tail Rotor control –**  
*No Interference*

**Gearbox Oil –** *Check Level*

**Aux Fuel Tank –** *No Leaks*

**Gearbox Cooling Hose –**  
*Secure/No Splits*

**All fasteners –**  
*Secure*

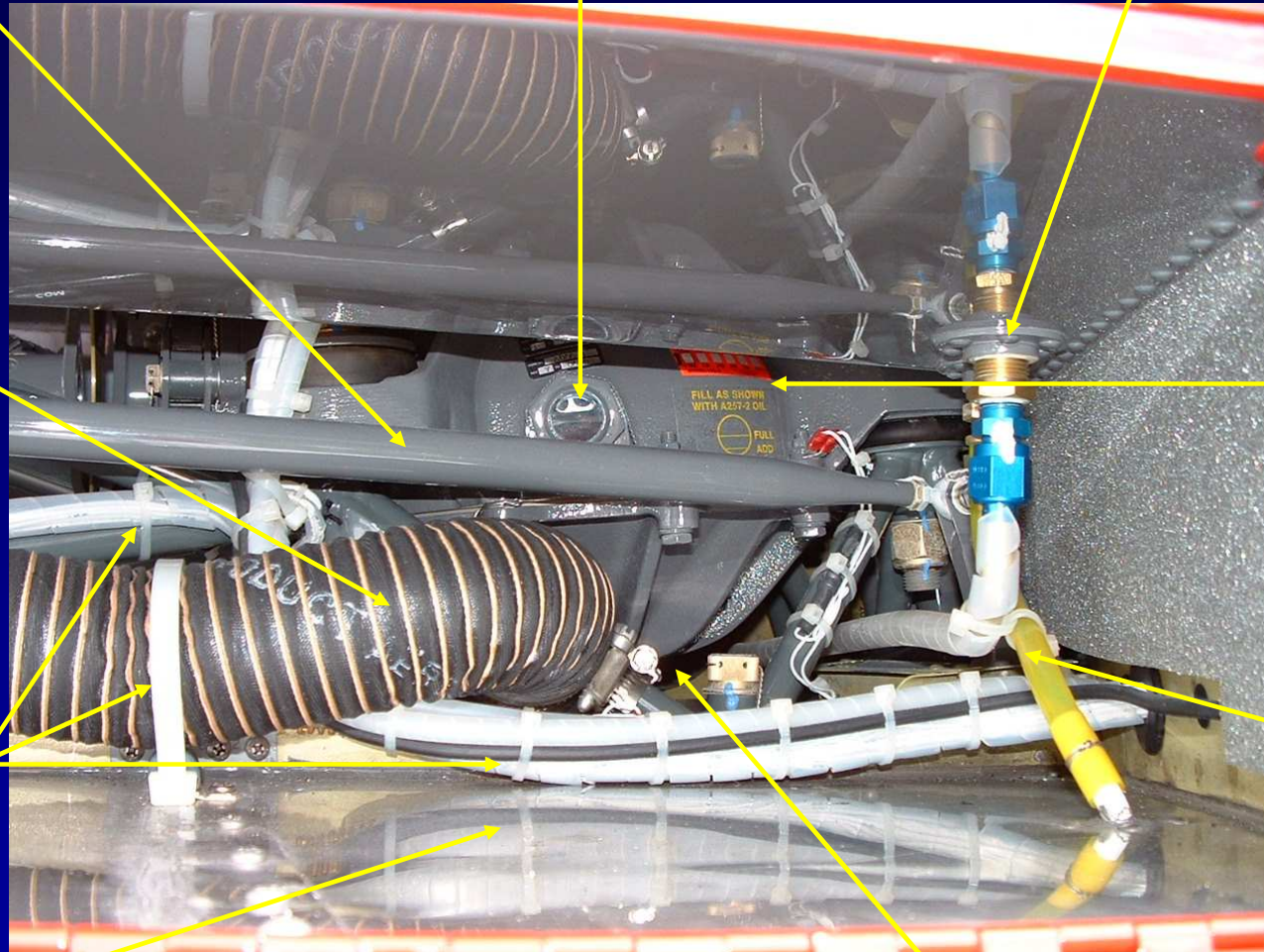
**M.R Gearbox Teletemp –**  
*Normal (If any of the windows have gone black ask an engineer or your instructor for advice)*

**Fuel Drain –**  
*Check ([Click Here for more info](#))*

**Area –** *Clear, (This is not a stowage area) No Loose Articles*

**Oil Leaks –** *Check*

***Close Cowl Door !***



## Aft. Cowl Door

**V-Belts – Slack,**  
**Check Condition**  
(Worn belts begin to split in  
the middle)

**Sprag Clutch**  
**Teletemp – Normal**  
(If any of the windows have  
gone black ask an engineer  
or your instructor for advice)

**Sprag Clutch –**  
**No Leaks**

**Steel Frame –**  
**Check Condition**

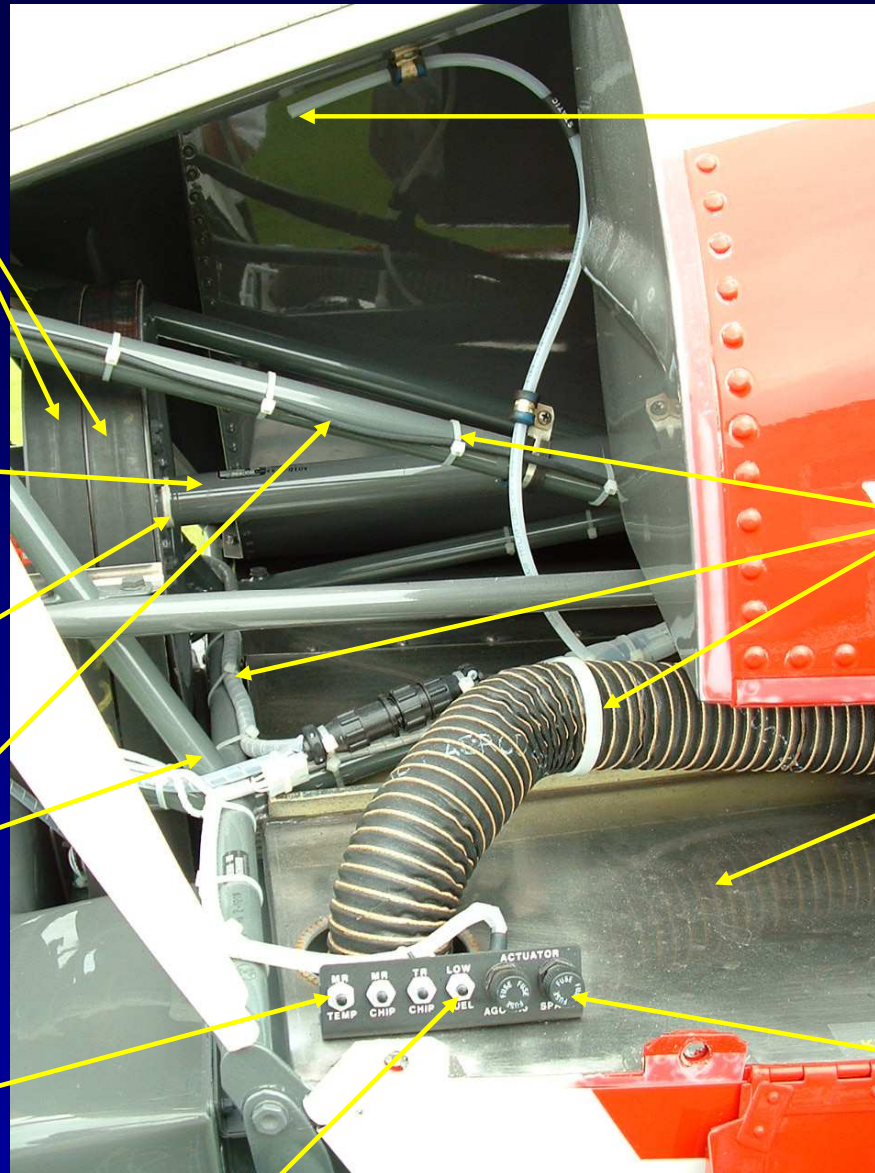
**Warning Lights –**  
**Master Battery On,**  
**Push To Test**

**Static Source –**  
**Clear** (This provides static  
air pressure to the ASI, VSI  
and Altimeter)

**All Fasteners -**  
**Secure**

**Area – Clear,** (This is  
not a stowage area) No  
Loose Articles

**Clutch Actuator**  
**Fuse & Spare -**  
**Check**



**Low Fuel Warning Light – Check Operation** (There  
will be a short delay before the light illuminates, this is so the low fuel  
light does not come on while the fuel moves around in flight)

## Aft. Cowl Door cont.

**Rotor Brake Micro-switch - Check** (This controls the brake warning light and prevents the engine being started with the brake on)

**Rotor Brake – Actuation Normal**

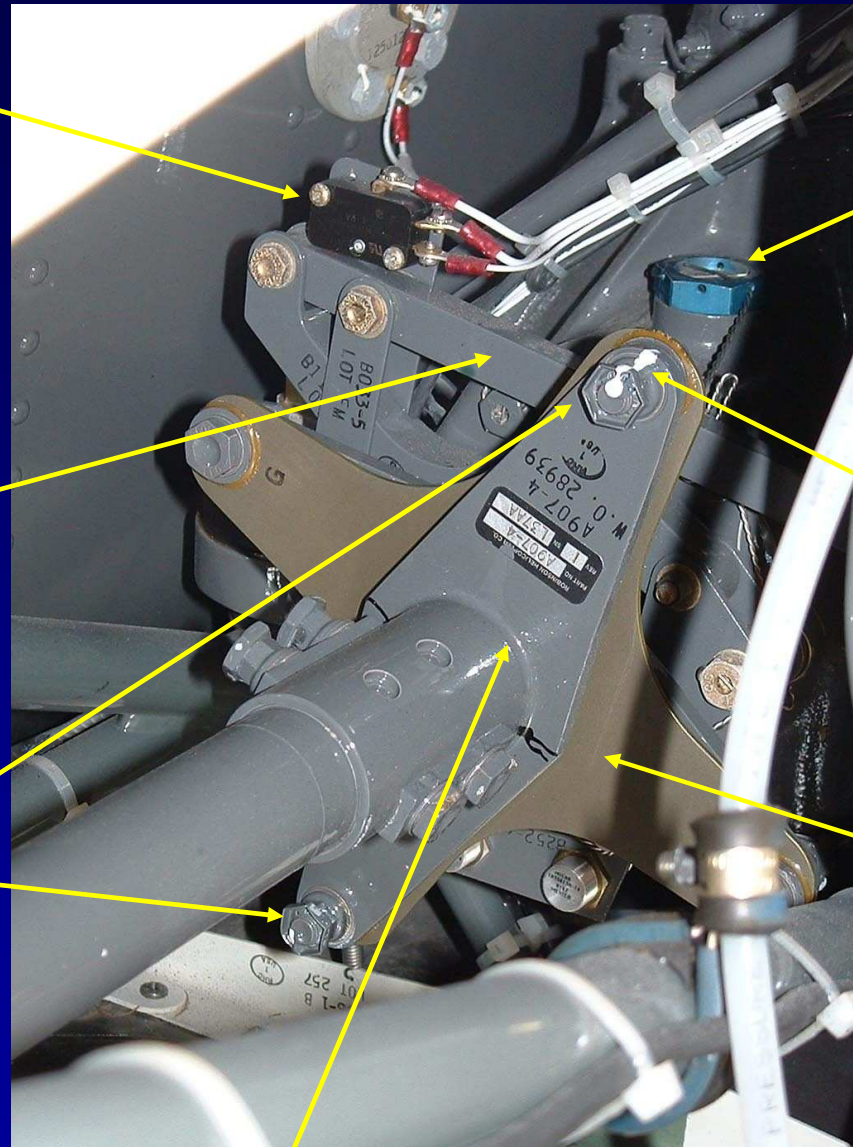
**Drive Shaft Bolts – Nut and Lock Nut Installed**

**Fwd Yoke Flange – Check Welds, No Cracks**

**Gearbox Oil Filler Cap - Secure**

**Torque Stripe – Intact** (Ensuring that the nuts have not moved since installation)

**Fwd Flex Plate – No Cracks/Damage**



**Close cowl door!**

## Aft. Right Side

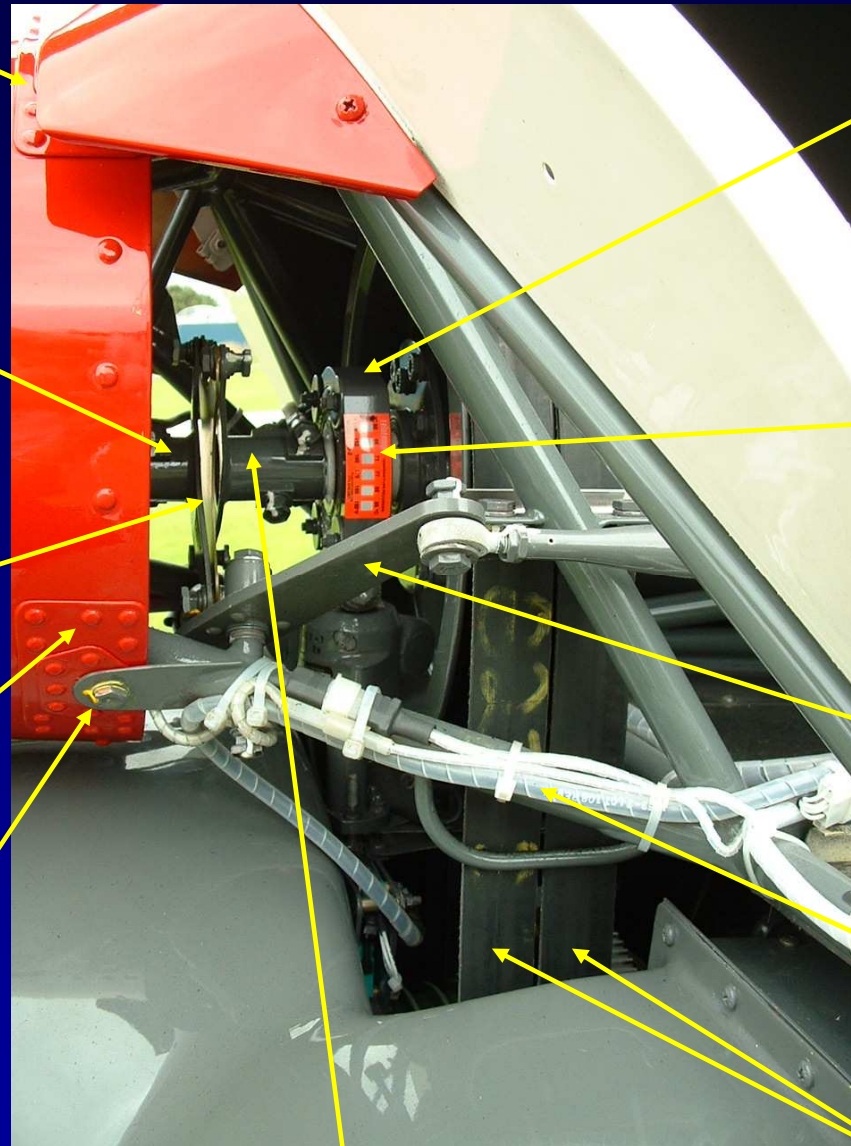
**Tail Boom  
Attachment Bolt -**  
*Installed/Secure*

**T.R Drive Shaft  
Yoke – No Cracks**

**Aft Flex Plate – No  
Cracks/Damage**

**Tail Boom  
Reinforcements –**  
*No Damage*

**Tail Boom  
Attachment Bolt –**  
*Installed/Secure*



**Upper Sheave  
Bearing – No Leaks**  
*(Indication of a failing  
bearing is an expulsion of  
grease)*

**Upper Sheave  
Bearing Teletemp –**  
*Normal (If any of the  
windows have gone black ask  
an engineer or your instructor  
for advice)*

**Tail Rotor control – No  
Interference**

**All Fasteners -**  
*Secure*

**V-Belts – Slack, Check  
Condition**

**Aft Yoke Flange – Check  
Welds, No Cracks**

## Engine Right Side

**Oil Cooler Door –** (Push to open)  
Check/No Debris

**Cooling Shroud –**  
No Cracks

**Rocker covers –**  
Secure/No leaks

**Spark Plugs –**  
Secure

**Oil Cooler –**  
No Leaks

**Electrical Terminals –**  
Tight

**Oil Lines –**  
No Leaks Or Chafing

**Inlet Air Duct –**  
Secure/Clear

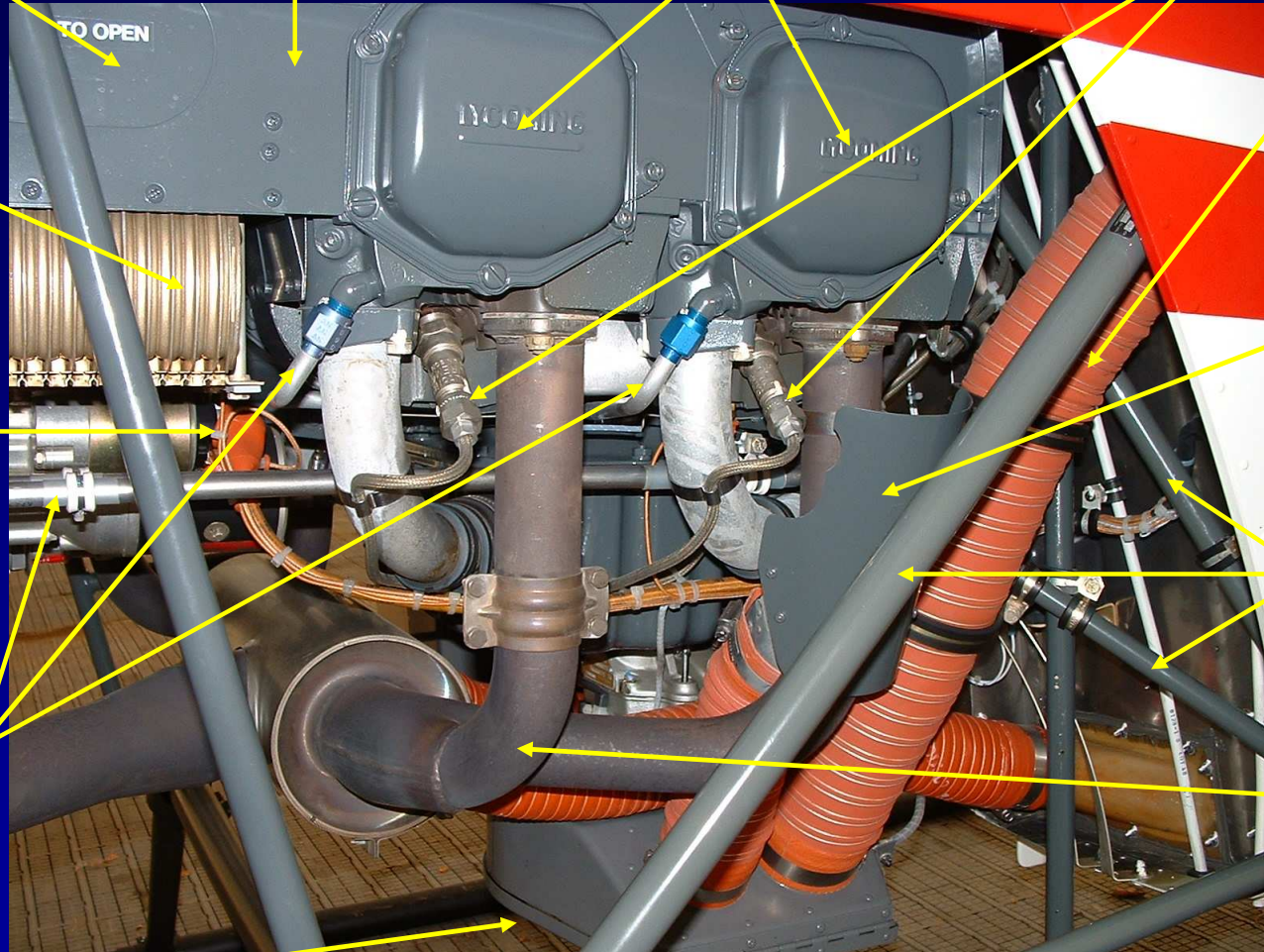
**Carb Heat Scoop –**  
Secure/Clear

**Steel Frame –**  
Check Condition

**Exhaust System –** No Cracks

**Air Box Valve –**  
Push Up To Check  
(Only installed on older aircraft)

**Engine General Condition –** No Leaks, Burnt Paint or Missing Components

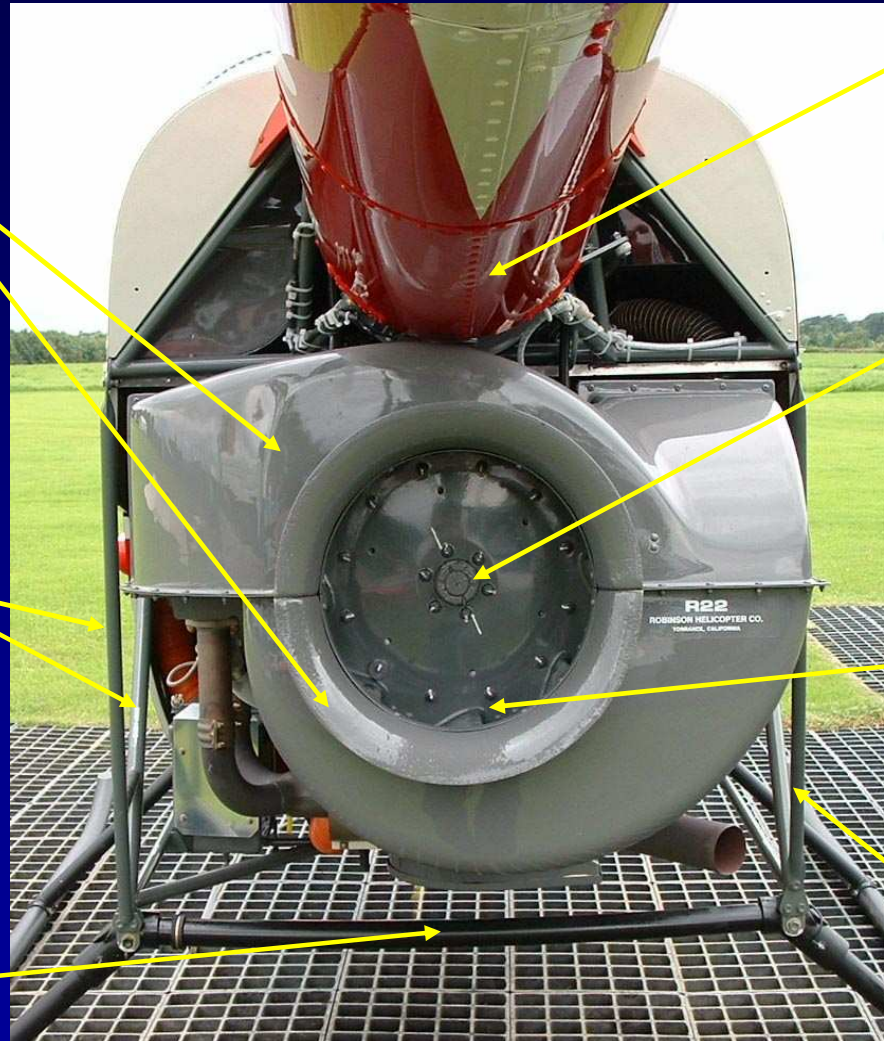


## Engine Rear

**Cooling Fan Shroud** – No Cracks/Damage

**Steel Frame** – Check Condition

**Rear Cross tube** – Condition/Straight



**Tail Boom** – No Damage/Rivets Missing

**Cooling Fan Nut** – Secure/Split Pin Aligned With Marks

**Cooling Fan** – Clear, Check Fins For Damage

**Steel Frame** – Check Condition

An aircraft that has had a **Heavy Landing** may show damage to the **Rear Cross Tube, Steel Frame** or the base of the **Tail Boom**.

# Empennage

**Tail Rotor Blades –**  
*Clean No Damage/  
Corrosion*

**Upper Vertical  
Stabiliser –**  
*Secure, No  
Damage/Rivets  
Missing*

**Position Light –**  
*Check Operation  
(Rear White)*

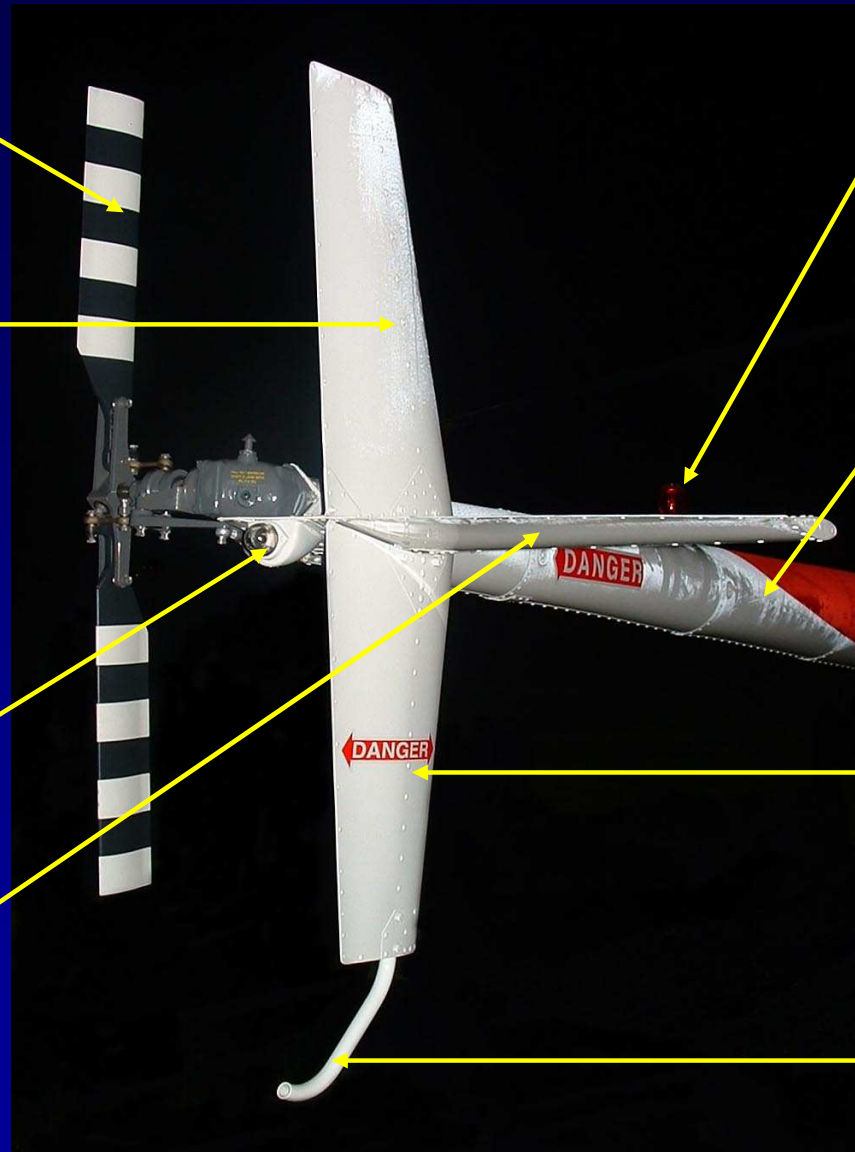
**Horizontal  
Stabiliser –**  
*Secure, No  
Damage/Rivets  
Missing*

**Anti Collision Light –**  
*Secure/Check Operation*

**Tail Cone – No Damage/  
Rivets Missing,**

**Lower Vertical  
Stabiliser – Secure,  
No Damage/Rivets  
Missing**

**Tail Skid – No Damage**



# **Tail Rotor Assembly**

**T.R Pitch Links – Free  
Without Looseness**

**T.R Gearbox Output  
Seal – No Leaks**

**T.R Gearbox Filler Cap  
& Breather - Secure**

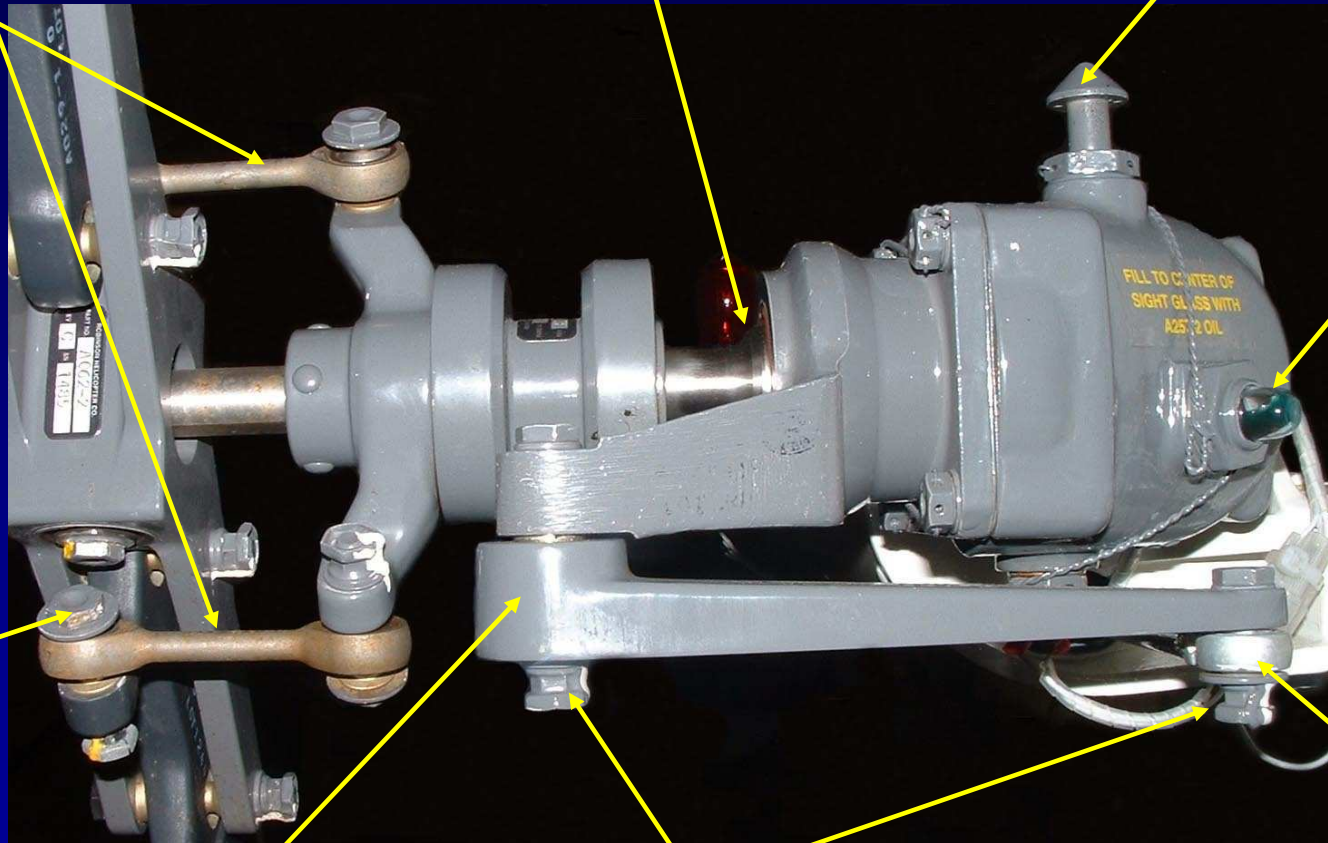
**T.R Gearbox  
Oil – Check  
Level, No  
Leaks**

**T.R  
Control –  
Free  
Without  
Looseness**

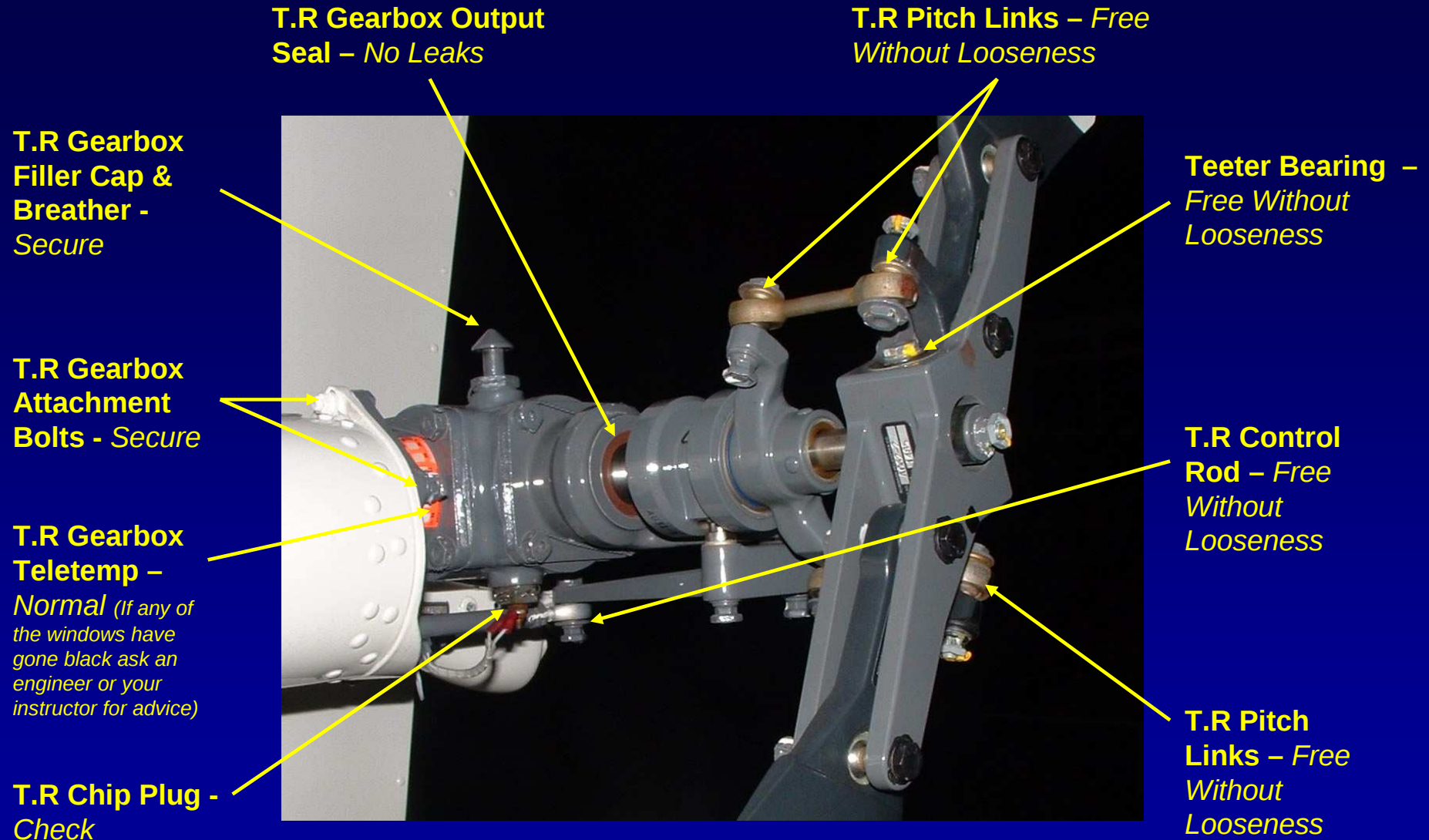
**Pitch Link  
Bolts –  
Secure/Check**

**Control Bell  
Crank –  
Free Without  
Looseness**

**Lock Nuts – Installed**  
(On all control bolts)



## Tail Rotor Assembly Cont



All control rods and control surfaces should be secured with a nut, lock nut and then marked with Torque Stripe, this ensures that they have not moved since installation.

## Engine Left Side

**Spark Plugs -**  
Secure

**Rocker Covers -**  
Secure/No leaks

**Alternator Cooling Hose -**  
Secure/No Splits

**Lower Bearing**  
**Teletemp -**  
Normal (If any of the  
windows have gone  
black ask an engineer  
or your instructor for  
advice)

**Engine Oil -**  
Check, 4 - 6  
Quarts

**Electrical**  
**Terminals -**  
Tight

**Battery -**  
Secure

**Gascolator**  
**Fuel Drain -**  
Check ([Click](#)  
[Here for more](#)  
[info](#))

**Starter Ring -**  
Check Condition

**Belts -**  
Check  
Condition

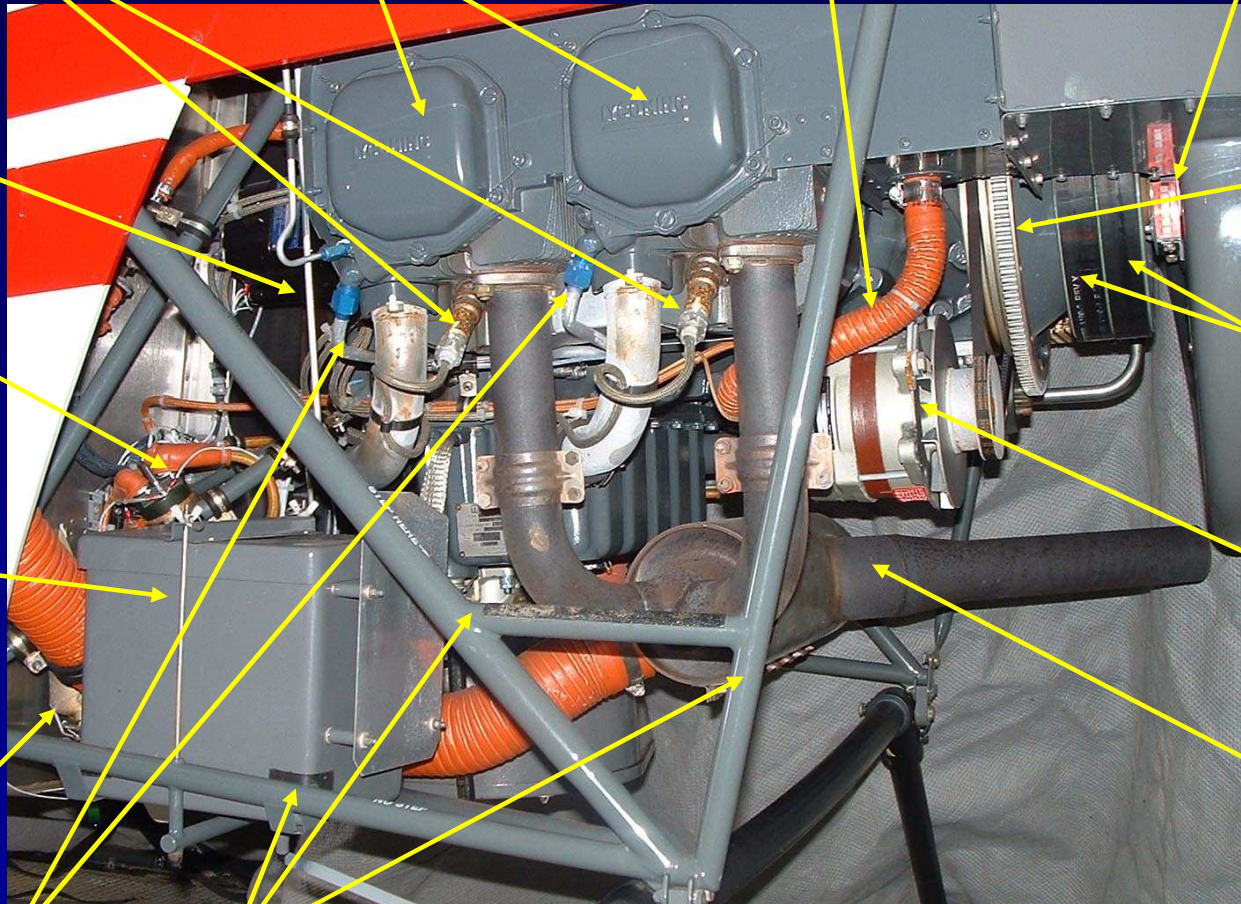
**Alternator -**  
Secure, Belt  
Tension

**Exhaust -**  
Secure/No  
Cracks

**Oil Lines - No**  
Leaks or Chafing

**Steel Frame -**  
Check Condition

**Engine General Condition - No Leaks,  
Burnt Paint or Missing Components**



# Main Rotor Head

**Pitch Link Jam Nuts - Secure**

**Main Hinge Bolts (x3) - Nuts Tight & Split Pins installed**

**Pitch Link Safety Wire - Secure**

**Blades – Clean No Damage** (To lower a blade push the opposite blade up! NEVER pull blades down)

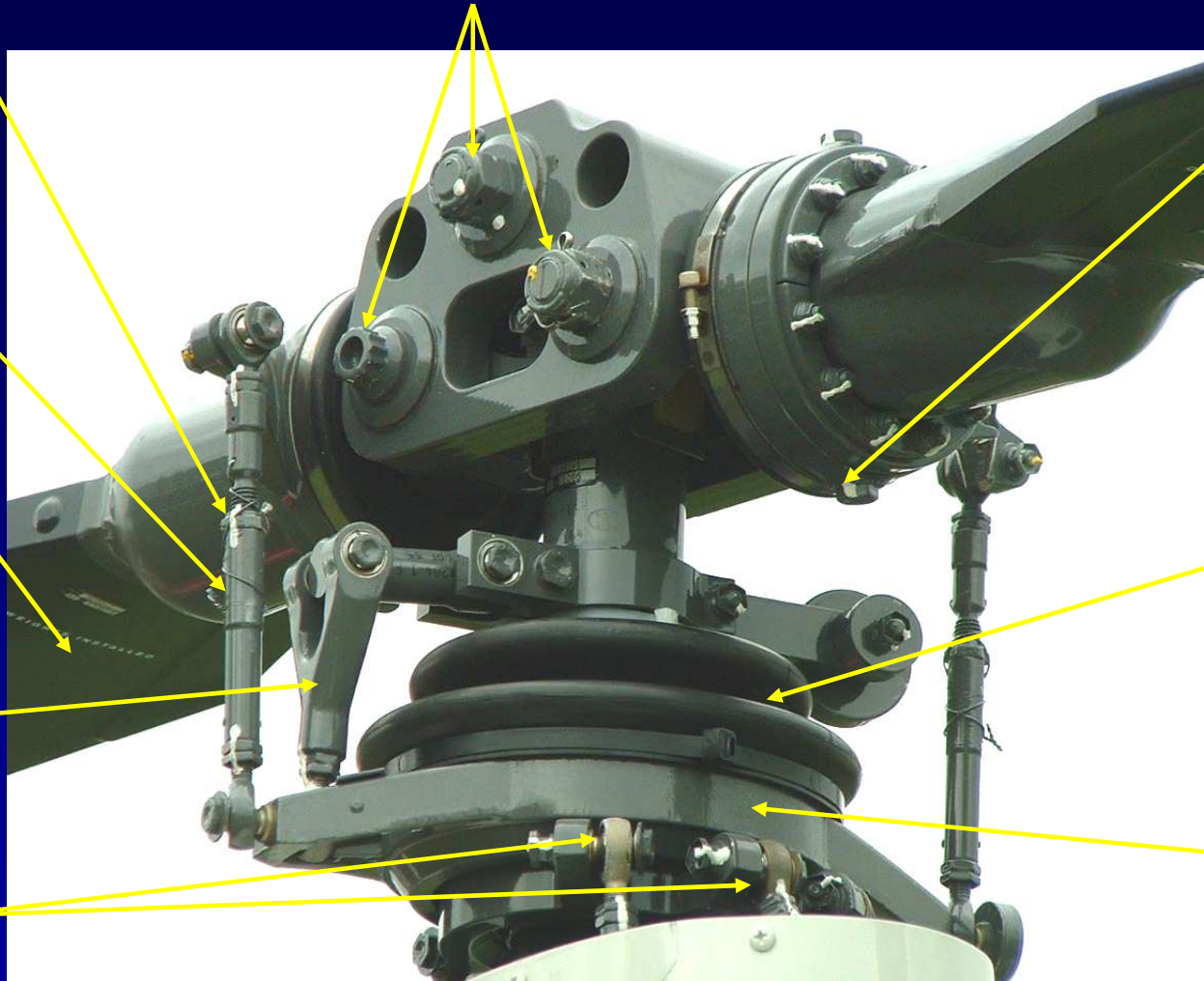
**Swashplate Scissors – No Excessive Looseness**

**All Rod Ends – Free Without Looseness**

**Pitch Change Boots - No Leaks** (The blade roots contain the spindle bearings, they run in a red oil. Look for signs of leaks down the mast fairing)

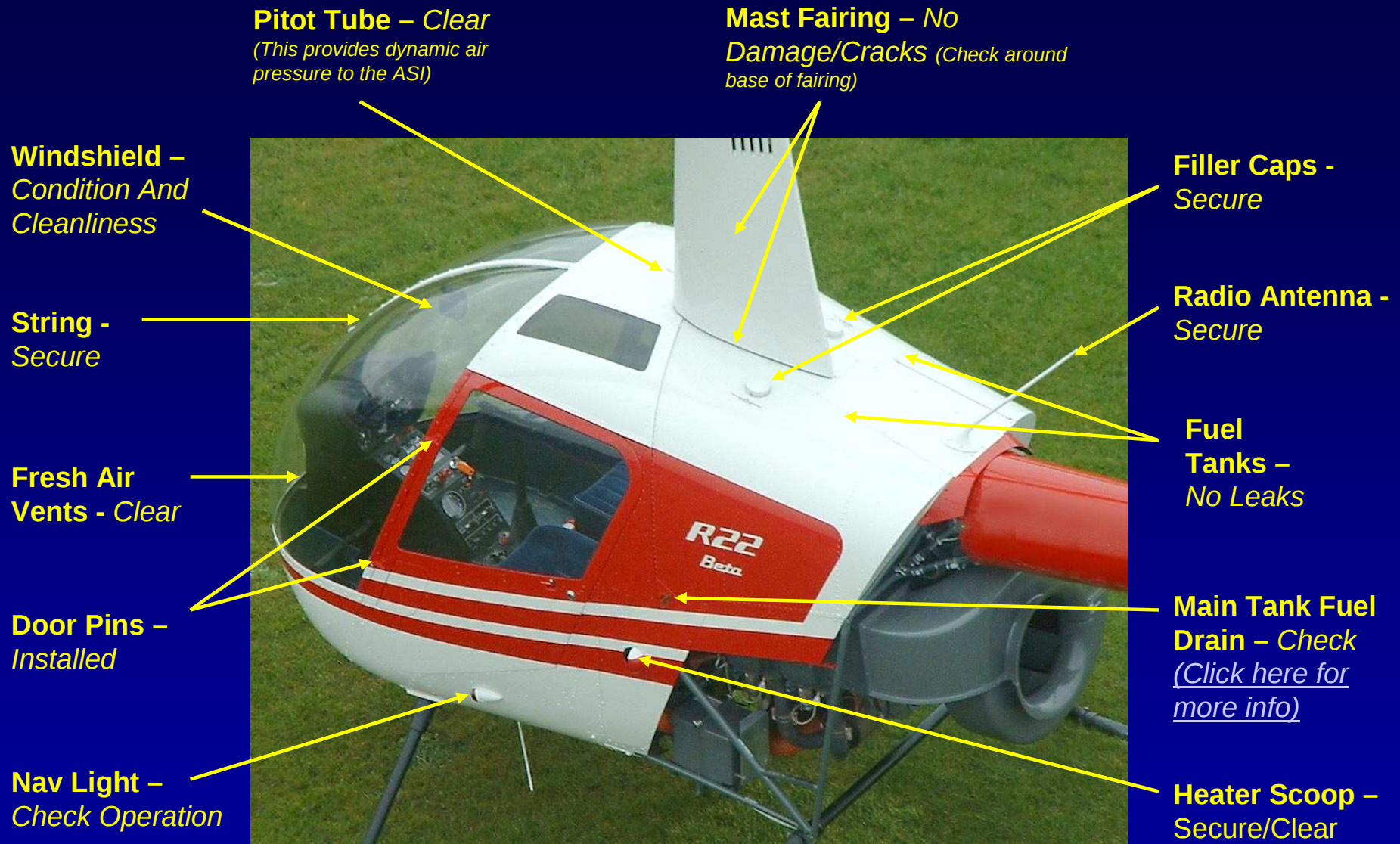
**Swashplate Bearing Boot – Secure, Top & Bottom**

**Swashplate – Free Without Looseness**



*All control rods and control surfaces should be secured with a nut, lock nut and then marked with Torque Stripe, this ensures that they have not moved since installation.*

# Airframe



**Aircraft General Condition** - While checking the aircraft ensure that there are no screws or rivets missing, all panels are straight and the framework is undamaged.

# **Aircraft Belly**

**VOR Antenna - Secure**

**Port Nav Light -  
Check (Left Red)**

**Gascolator Fuel Drain - Check**

**Landing  
Lights - Check**

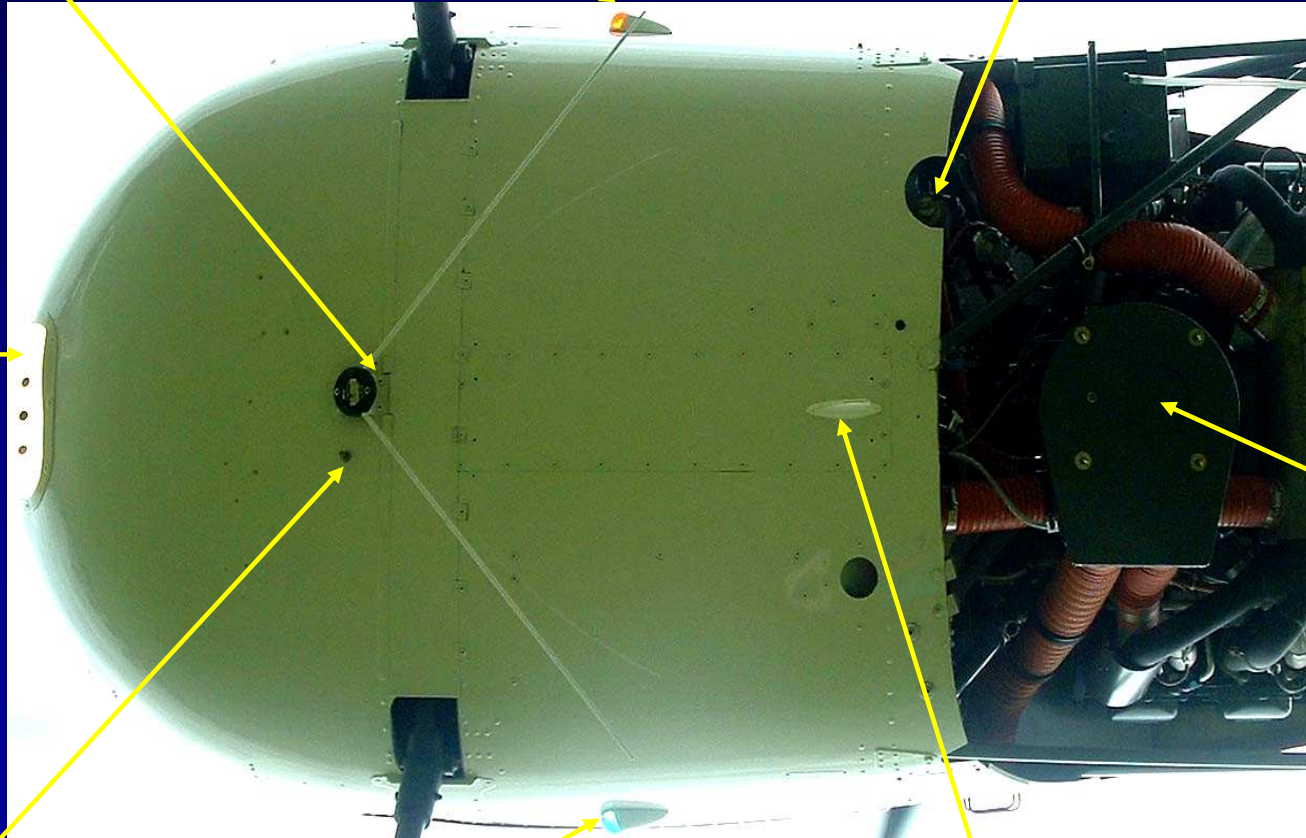
*(Landing Lights will  
only come on if clutch  
is engaged. To check  
lamps pull Clutch CB,  
engage Clutch, then  
turn Landing Lights  
on)*

**Air Box  
Valve - Push  
Up To Check**  
*(Only installed on  
older aircraft)*

**OAT Sensor -  
Check**

**Starboard Nav  
Light - Check**  
*(Right Green)*

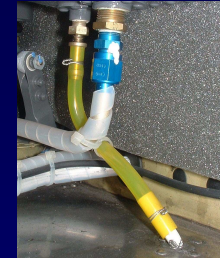
**Transponder  
Antenna - Secure**



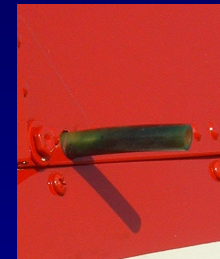
# Fuel Sample

A fuel sample should be taken from 3 points on the R22.

**The Aux Tank.....**



**The Main Tank.....**



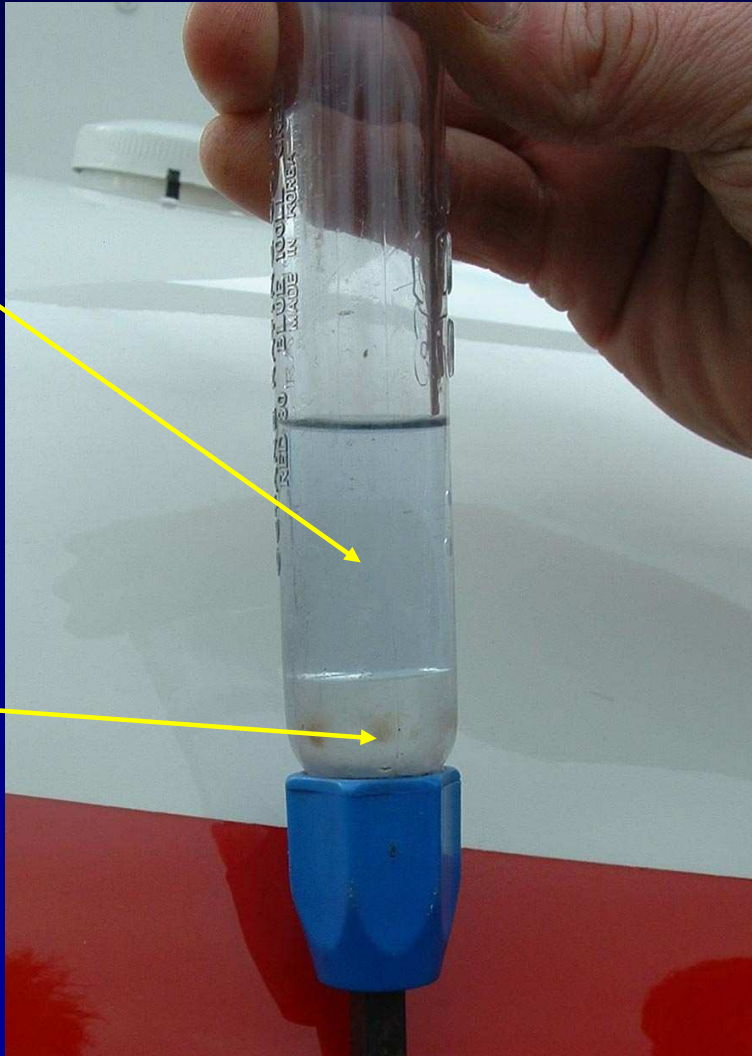
**The Gascolator (Fuel Bowl)**



**A good sample** should contain no water or debris. Both of which are heavier than fuel and therefore sink to the bottom of the sample. To see water more clearly hold the sample up to a white background. If water is found in your fuel sample continue to drain fuel until a clear sample is obtained.

**Fuel –**  
Avgas 100LL  
is coloured  
blue for  
identification  
and floats on  
top of water

**Water –**  
Clear and  
sinks  
beneath the  
fuel



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