

# 2013 Hyundai Equus Ultimate

2012-13 ENGINE Cylinder Head Assembly - 5.0L GDI - Equus

## 2012-13 ENGINE

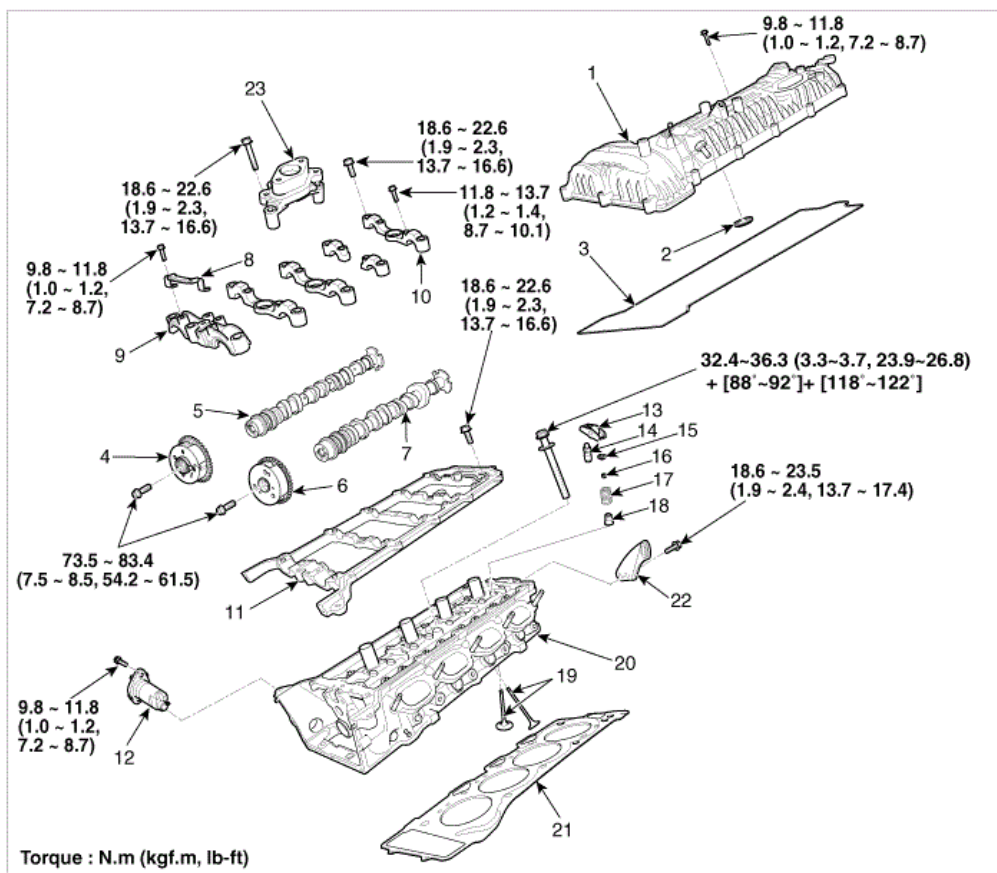
### Cylinder Head Assembly - 5.0L GDI - Equus

## CYLINDER HEAD

### COMPONENTS AND COMPONENTS LOCATION

#### Components

[RH]



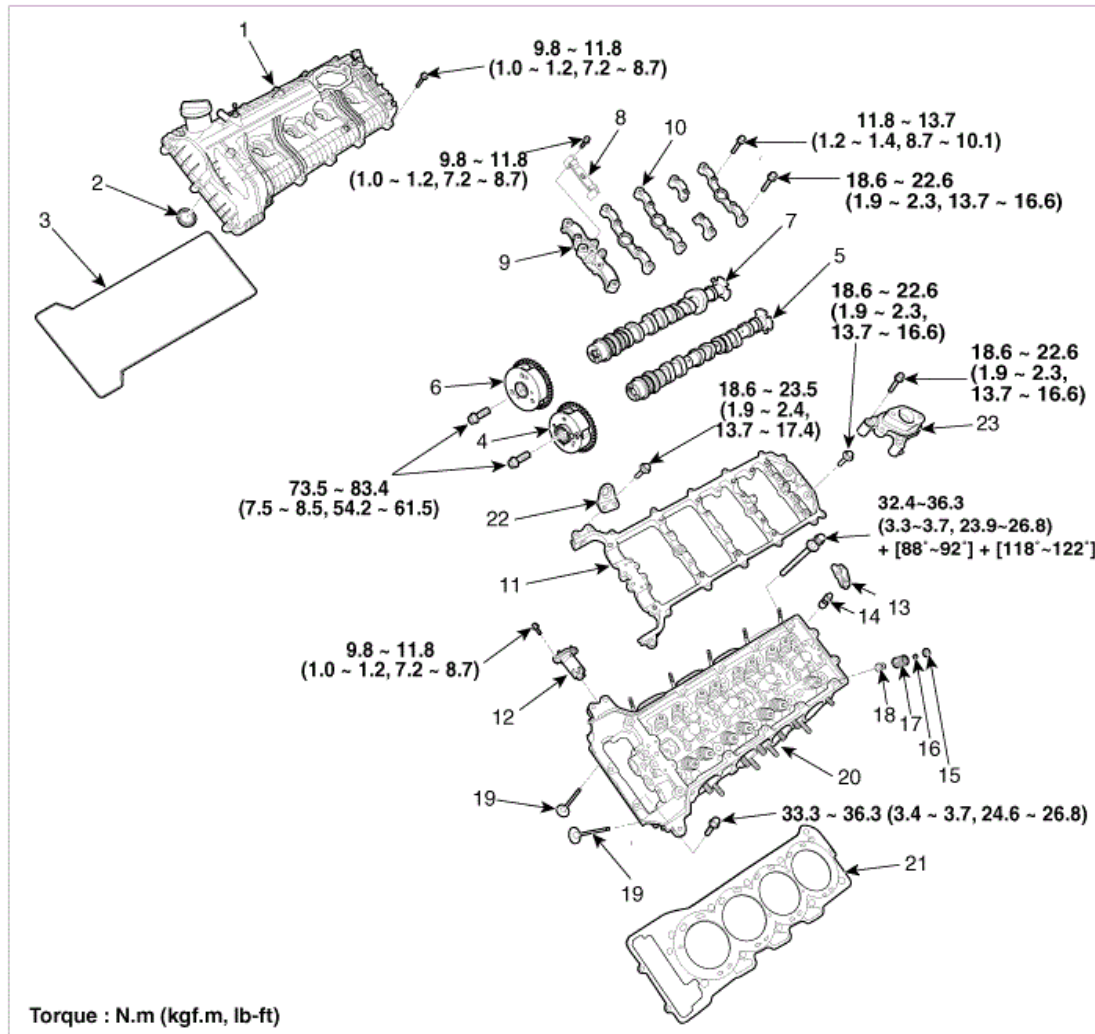
1. Cylinder head cover	9. Camshaft thrust bearing cap	17. Valve spring
2. Cylinder head cover oil seal	10. Camshaft bearing cap	18. Valve stem seal
3. Cylinder head cover gasket	11. Camshaft carrier	19. Valve
4. Exhaust CVVT assembly	12. Timing chain tensioner	20. Cylinder head, RH
5. Exhaust camshaft, RH	13. Roller finger follower	21. Cylinder head gasket, RH
6. Intake CVVT assembly	14. Hydraulic lash adjuster (HLA) assembly	22. Engine hanger
7. Intake camshaft, RH	15. Valve spring retainer	23. Fuel pump adapter
8. Cam to cam guide	16. Valve spring retainer lock	

**Fig. 1: Identifying Cylinder Head Assembly Components With Torque Specifications (RH)**  
 Courtesy of HYUNDAI MOTOR AMERICA

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[LH]



**Fig. 2: Identifying Cylinder Head Assembly Components With Torque Specifications (LH)**  
Courtesy of HYUNDAI MOTOR AMERICA

### REPAIR PROCEDURES

#### Removal

#### CAUTION:

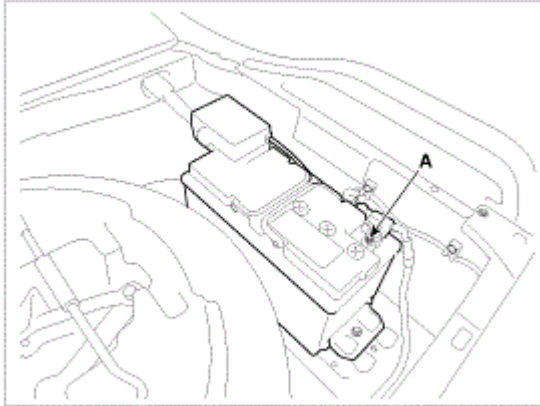
- Use fender covers to avoid damaging painted surfaces.
- To avoid damaging the cylinder head, wait until the engine coolant temperature drops below normal operating temperature before removing it.
- When handling a metal gasket, take care not to fold the gasket or damage the contact surface of the gasket.
- To avoid damage, unplug the wiring connectors carefully while

holding the connector portion.

**NOTE:**

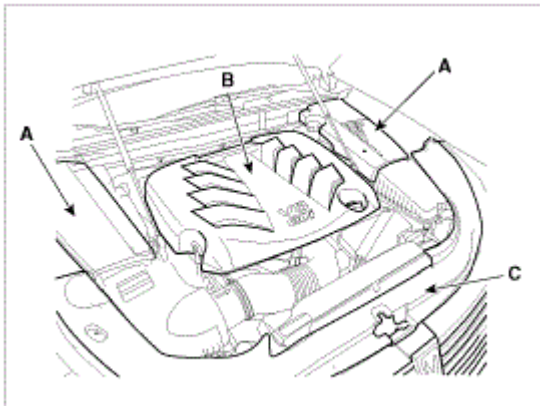
- Mark all wiring and hoses to avoid misconnection.
- Turn the crankshaft pulley so that the No. 1 piston is at top dead center.

1. Disconnect the negative terminal (A) from the battery.



**Fig. 3: Identifying Battery Negative Terminal**  
Courtesy of HYUNDAI MOTOR AMERICA

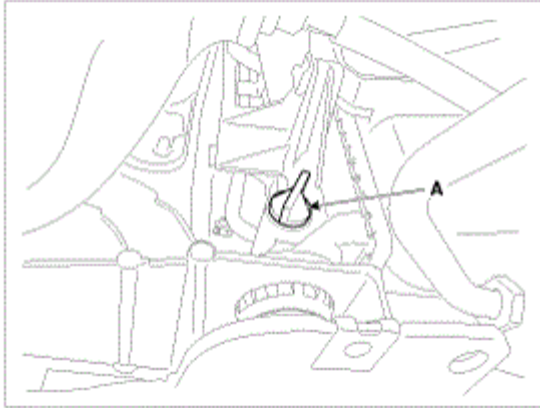
2. Remove the engine room cover (A), engine cover (B) and radiator grill upper cover (C).



**Fig. 4: Identifying Engine Room Covers, Engine Cover And Radiator Grill Upper Cover**  
Courtesy of HYUNDAI MOTOR AMERICA

3. Loosen the drain plug (A) and drain the engine coolant. Remove the radiator cap to speed draining.

**WARNING:** Never remove the radiator cap when the engine is hot. Serious scalding could be caused by hot fluid under high pressure escaping from the radiator.



**Fig. 5: Identifying Drain Plug**  
Courtesy of HYUNDAI MOTOR AMERICA

4. Remove the air cleaner assembly.
  1. Remove the air duct (A).
  2. Disconnect the breather hose (B).
  3. Loosen the clamp (C) and then disconnect the air intake hose from the throttle body.

**Tightening torque:**

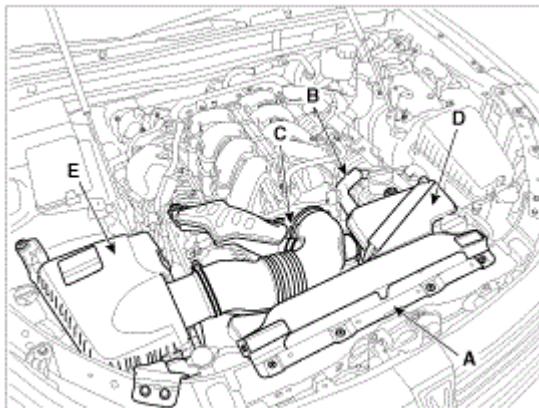
2.9 ~ 4.9N.m (0.3 ~ 0.5kgf.m, 2.2 ~ 3.6lb-ft)

4. Remove the chamber air cleaner (D) and air cleaner assembly (E).

**Tightening torque**

Air cleaner assembly bolts:

7.8 ~ 9.8N.m (0.8 ~ 1.0kgf.m, 5.8 ~ 7.2lb-ft)



**Fig. 6: Identifying Air Duct, Breather Hose, Clamp, Chamber Air Cleaner And Air Cleaner**