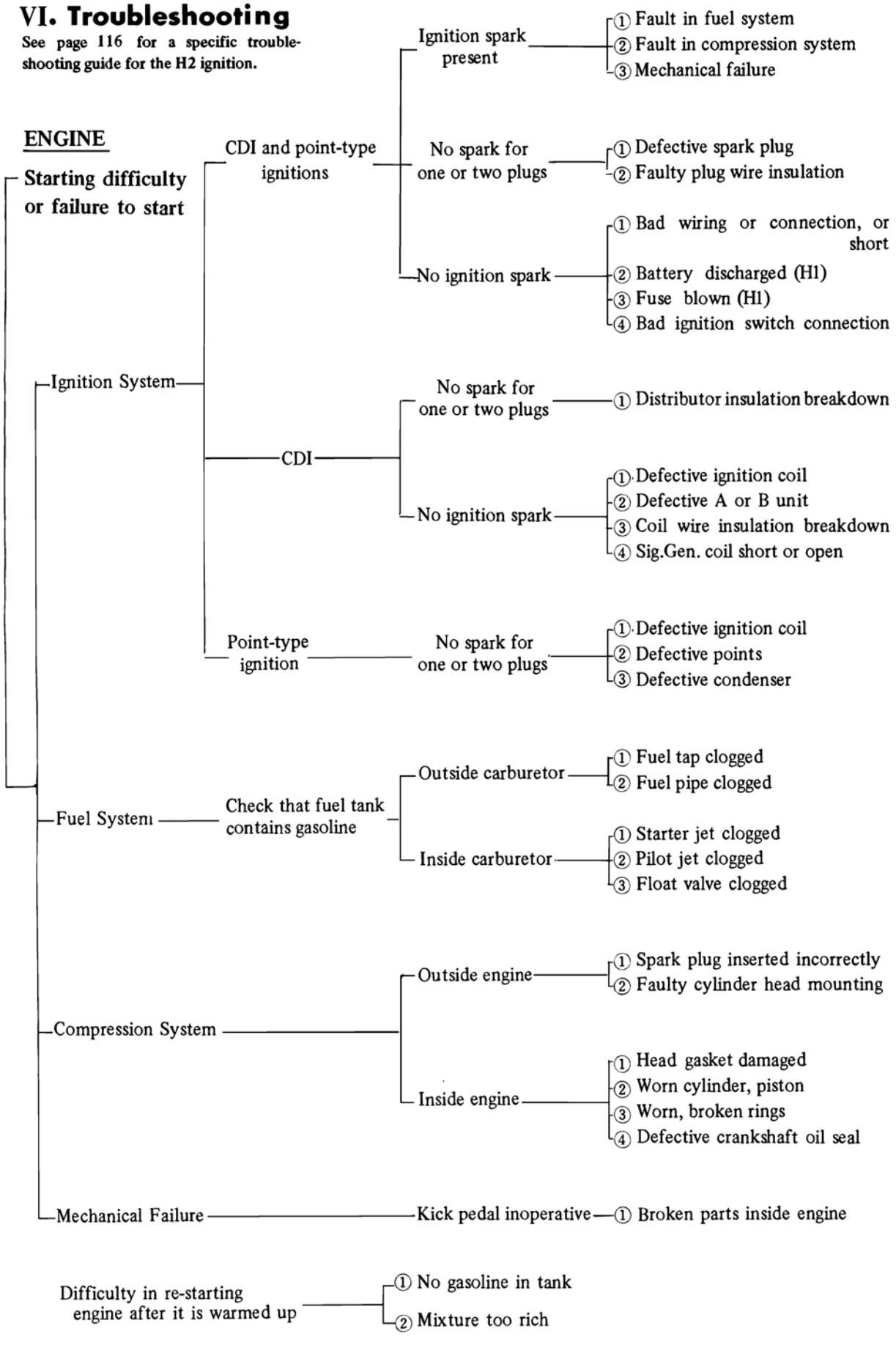
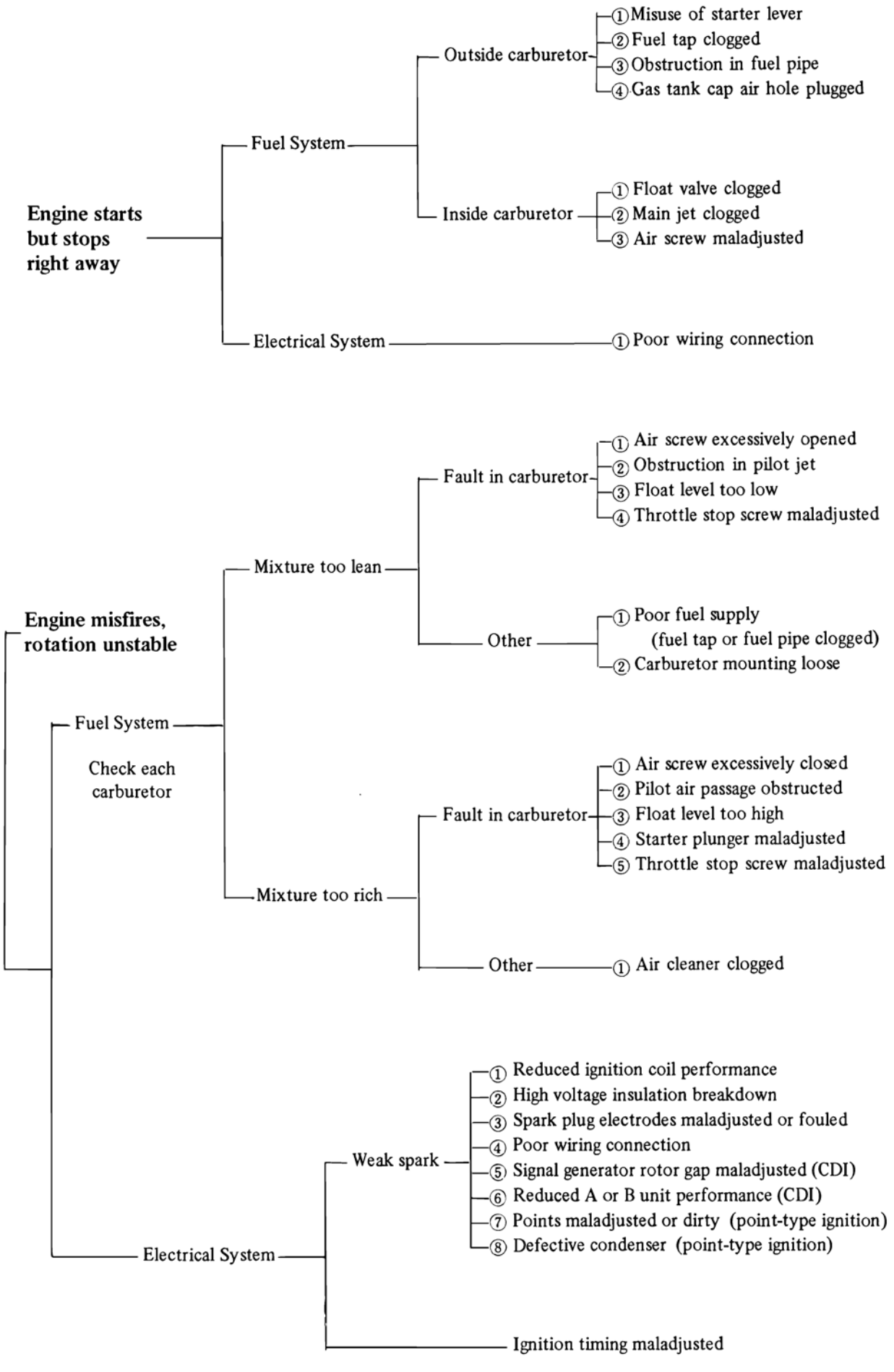
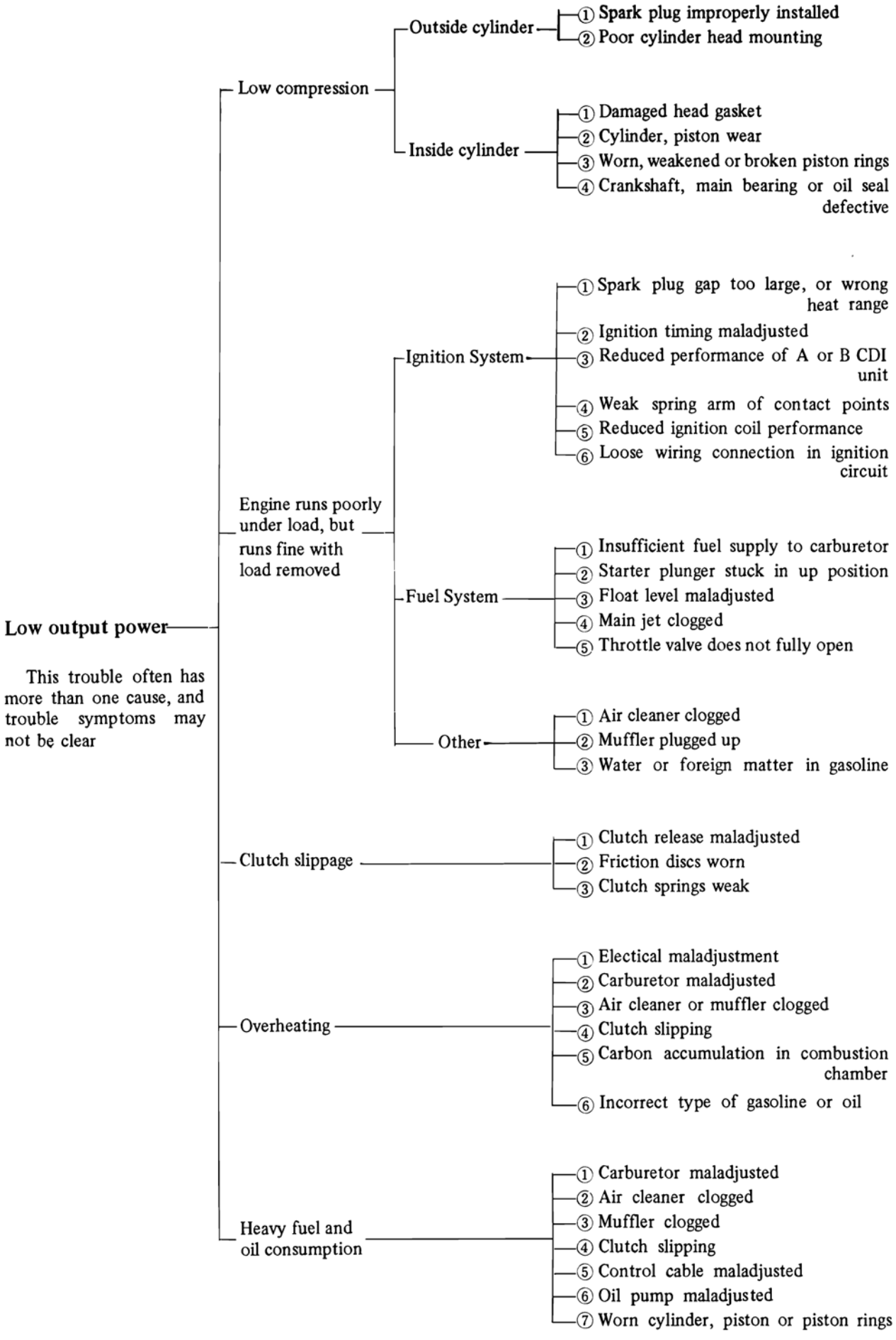
VI. Troubleshooting

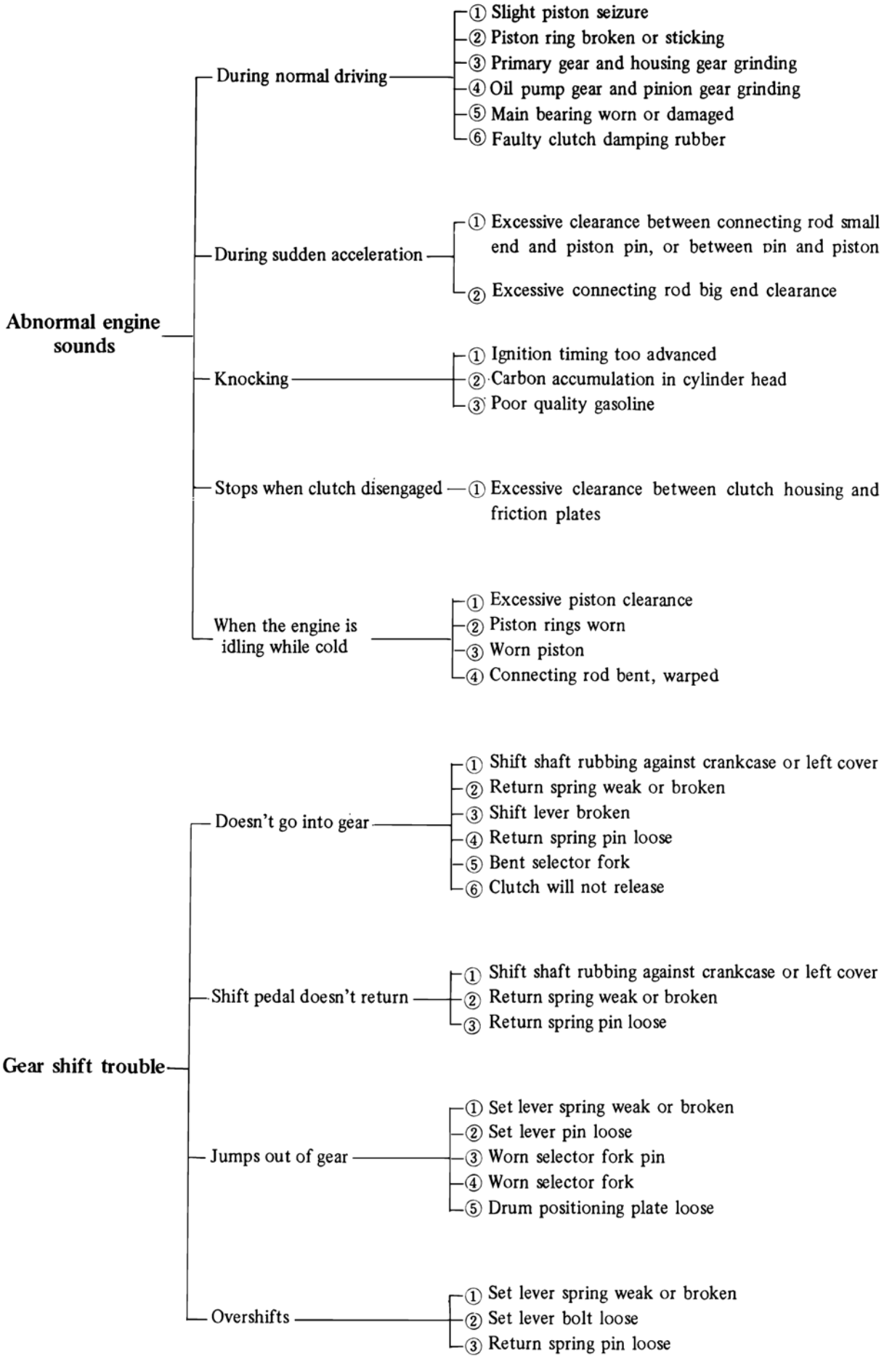
See page 116 for a specific trouble-shooting guide for the H2 ignition.



Note: When starting a warm engine, hold the throttle grip full open until the engine starts and r.p.m. starts to rise. Do not use the starter lever.


Engine starts but stops right away
Fuel System
Outside carburetor
① Misuse of starter lever
② Fuel tap clogged
③ Obstruction in fuel pipe
④ Gas tank cap air hole plugged
Inside carburetor
① Float valve clogged
② Main jet clogged
③ Air screw maladjusted
Electrical System
① Poor wiring connection
Engine misfires, rotation unstable
Fuel System
Check each carburetor
Mixture too lean
Fault in carburetor
① Air screw excessively opened
② Obstruction in pilot jet
③ Float level too low
④ Throttle stop screw maladjusted
Other
① Poor fuel supply (fuel tap or fuel pipe clogged)
② Carburetor mounting loose
Mixture too rich
Fault in carburetor
① Air screw excessively closed
② Pilot air passage obstructed
③ Float level too high
④ Starter plunger maladjusted
⑤ Throttle stop screw maladjusted
Other
① Air cleaner clogged
Electrical System
Weak spark
① Reduced ignition coil performance
② High voltage insulation breakdown
③ Spark plug electrodes maladjusted or fouled
④ Poor wiring connection
⑤ Signal generator rotor gap maladjusted (CDI)
⑥ Reduced A or B unit performance (CDI)
⑦ Points maladjusted or dirty (point-type ignition)
⑧ Defective condenser (point-type ignition)
Ignition timing maladjusted


Low output power
This trouble often has more than one cause, and trouble symptoms may not be clear
Low compression
Outside cylinder
① Spark plug improperly installed
② Poor cylinder head mounting
Inside cylinder
① Damaged head gasket
② Cylinder, piston wear
③ Worn, weakened or broken piston rings
④ Crankshaft, main bearing or oil seal defective
Engine runs poorly under load, but runs fine with load removed
Ignition System
① Spark plug gap too large, or wrong heat range
② Ignition timing maladjusted
③ Reduced performance of A or B CDI unit
④ Weak spring arm of contact points
⑤ Reduced ignition coil performance
⑥ Loose wiring connection in ignition circuit
Fuel System
① Insufficient fuel supply to carburetor
② Starter plunger stuck in up position
③ Float level maladjusted
④ Main jet clogged
⑤ Throttle valve does not fully open
Other
① Air cleaner clogged
② Muffler plugged up
③ Water or foreign matter in gasoline
Clutch slippage
① Clutch release maladjusted
② Friction discs worn
③ Clutch springs weak
Overheating
① Electical maladjustment
② Carburetor maladjusted
③ Air cleaner or muffler clogged
④ Clutch slipping
⑤ Carbon accumulation in combustion chamber
⑥ Incorrect type of gasoline or oil
Heavy fuel and oil consumption
① Carburetor maladjusted
② Air cleaner clogged
③ Muffler clogged
④ Clutch slipping
⑤ Control cable maladjusted
⑥ Oil pump maladjusted
⑦ Worn cylinder, piston or piston rings


Abnormal engine sounds
During normal driving
① Slight piston seizure
② Piston ring broken or sticking
③ Primary gear and housing gear grinding
④ Oil pump gear and pinion gear grinding
⑤ Main bearing worn or damaged
⑥ Faulty clutch damping rubber
During sudden acceleration
① Excessive clearance between connecting rod small end and piston pin, or between pin and piston
② Excessive connecting rod big end clearance
Knocking
① Ignition timing too advanced
② Carbon accumulation in cylinder head
③ Poor quality gasoline
Stops when clutch disengaged
① Excessive clearance between clutch housing and friction plates
When the engine is idling while cold
① Excessive piston clearance
② Piston rings worn
③ Worn piston
④ Connecting rod bent, warped
Gear shift trouble
Doesn't go into gear
① Shift shaft rubbing against crankcase or left cover
② Return spring weak or broken
③ Shift lever broken
④ Return spring pin loose
⑤ Bent selector fork
⑥ Clutch will not release
Shift pedal doesn't return
① Shift shaft rubbing against crankcase or left cover
② Return spring weak or broken
③ Return spring pin loose
Jumps out of gear
① Set lever spring weak or broken
② Set lever pin loose
③ Worn selector fork pin
④ Worn selector fork
⑤ Drum positioning plate loose
Overshifts
① Set lever spring weak or broken
② Set lever bolt loose
③ Return spring pin loose

Clutch malfunction

- Doesn't disengage
  - ① Clutch release maladjusted
  - ② Friction or steel plates warped
  - ③ Tension uneven among clutch springs
  - ④ Transmission oil old or too heavy
  - ⑤ Too much transmission oil
  - ⑥ Seized clutch bushings
- Slips
  - ① Clutch release maladjusted
  - ② Friction plates worn
  - ③ Clutch steel plates worn
  - ④ Clutch springs weak

FRAME

Poor steering control

Special care must be taken in this area since faulty steering is dangerous.

- Handlebars hard to turn
  - ① Steering stem lock nut too loose
  - ② Bearings damaged or cracked
  - ③ Steering stem bent
  - ④ Front tire air pressure low
- Front or rear wheel wobbles
  - ① Worn front or rear wheel bearings
  - ② Spokes loose
  - ③ Front or rear wheel rim warped
  - ④ Swing arm bushing, sleeve worn
- Handlebars pull to one side
  - ① Front or rear shock absorbers unbalanced
  - ② Front and rear wheel misaligned
  - ③ Front or rear fork bent
  - ④ Frame twisted

Shock absorbing bad

- Too soft
  - ① Front fork springs weak
  - ② Front fork oil level low, or oil too light
  - ③ Rear shock absorbers maladjusted, springs weak, or oil leaking
- Too hard
  - ① Front fork oil too heavy, old, or oil level too high
  - ② Fork bent
  - ③ Rear shock absorbers maladjusted or defective
  - ④ Tire air pressure too high
  - ⑤ Seat cushions bad

Brakes don't hold

- ① Brakes maladjusted
- ② Brake linings worn, or only one side touching
- ③ Foreign matter, oil, water between brake lining and drum
- ④ Brake cam worn
- ⑤ Brake drum worn
- ⑥ Brake panel bushing worn
- ⑦ Brake cable defective
- ⑧ Air in brake line (disc brakes)
- ⑨ Disc brake fluid low or leaking

See disc brake section for more information.

Periodic Maintenance Guide

Operation \ Frequency	After initial 800 km	After initial 5,000 km	Every subsequent 5,000 km	Every subsequent 10,000 km
Check, adjust brakes	•	•	•	
Check, adjust clutch	•	•	•	
Check, adjust carburetors and oil pump	•	•	•	
Check spoke tightness and rim runout	•	•	•	
Clean fuel system	•	•	•	
Clean, set spark plug gaps	•	•	•	
Check brake fluid level	•	•	•	
Check tire pressure and tread wear	•	•	•	
Change transmission oil	•		•	
Check points, timing	•		•	
Check steering play	•			•
Tighten bolts and nuts	•			•
Check drive chain wear		•	•	
Clean air cleaner element		•	•	
Perform general lubrication		•	•	
Lubricate drive chain	Every 300 km			
Check, adjust drive chain	Every 800 km			
Check brake wear	Every 10,000 km			
Change front fork oil	Every 10,000 km			
Change air cleaner element	*Every 10,000 km or after cleaning 5 times			
Change brake fluid	*Every year or 10,000 km			
Regrease wheel bearings	*Every 2 years or 20,000 km			
Regrease speedometer gear housing	*Every 2 years or 20,000 km			
Regrease brake camshaft	*Every 2 years or 20,000 km			
Lubricate steering stem bearings	*Every 2 years or 20,000 km			

* Whichever occurs first

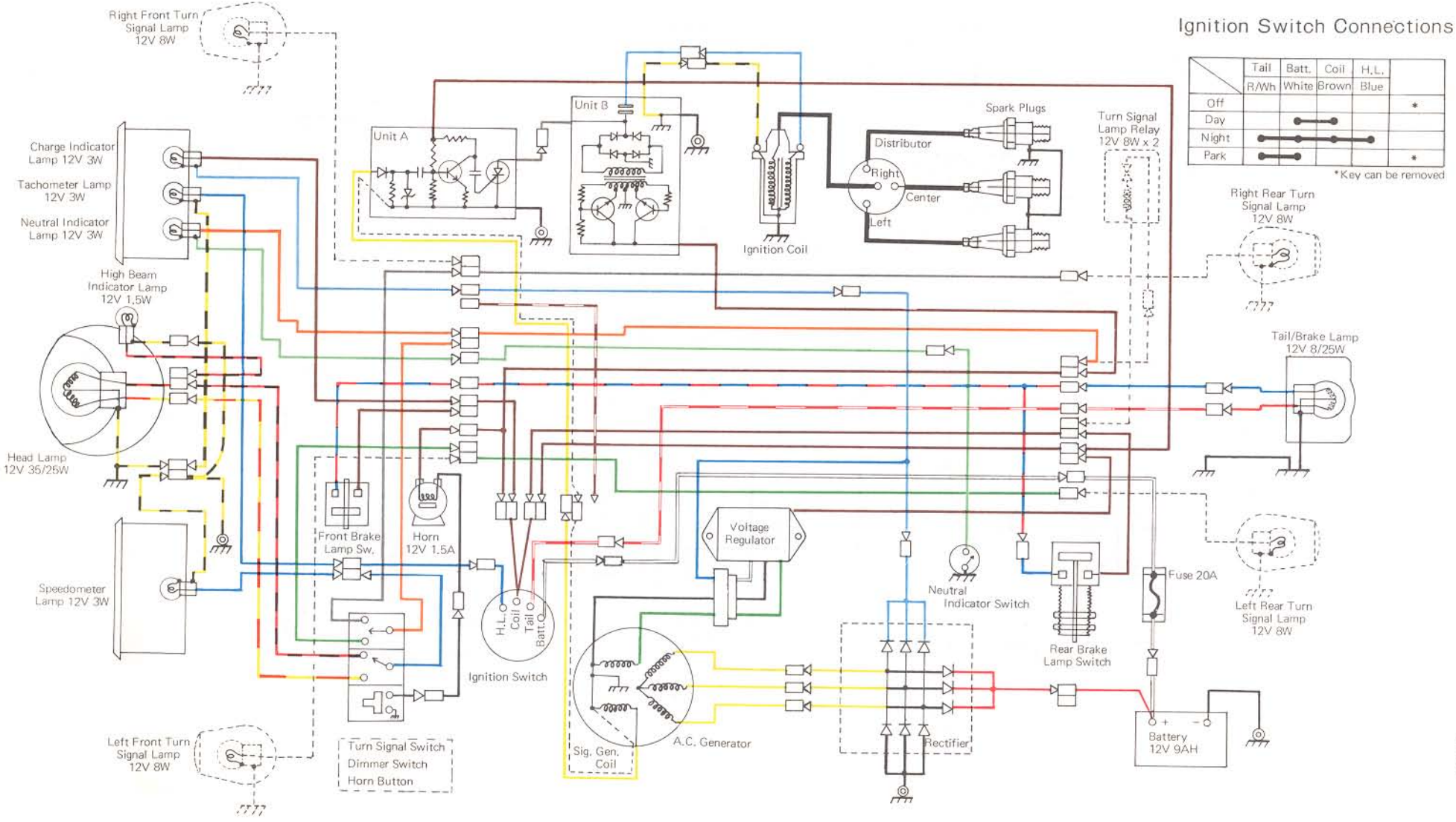
Torque Table

Torque values listed below should be used in tightening all nuts and bolts. Where a different value is prescribed in the shop manual text, the text supersedes this table. All of these values are for use with dry solvent cleaned threads.

	Nominal dia. (mm)	Pitch (mm)	Torque [ft-lb (kg-m)]
Coarse Threads	5	0.80	2.5 – 3.5 (0.35 – 0.50)
	6	1.00	4.5 – 6.5 (0.6 – 0.9)
	8	1.25	11.5 – 16.0 (1.6 – 2.2)
	10	1.50	22 – 30 (3.1 – 4.2)
	12	1.75	39 – 54 (5.4 – 7.5)
	14	2.00	60 – 83 (8.3 – 11.5)
	16	2.00	94 – 130 (13 – 18)
	18	2.50	130 – 181 (18 – 25)
	20	2.50	188 – 253 (26 – 35)
Fine Threads	5	0.50	2.5 – 3.5 (0.35 – 0.50)
	6	0.75	4.5 – 5.5 (0.6 – 0.8)
	8	1.00	10.0 – 13.5 (1.4 – 1.9)
	10	1.25	19.0 – 25 (2.6 – 3.4)
	12	1.50	33 – 45 (4.5 – 6.2)
	14	1.50	54 – 74 (7.4 – 10.2)
	16	1.50	83 – 116 (11.5 – 16)
	18	1.50	123 –166 (17 – 23)
	20	1.50	166 – 239 (23 – 33)

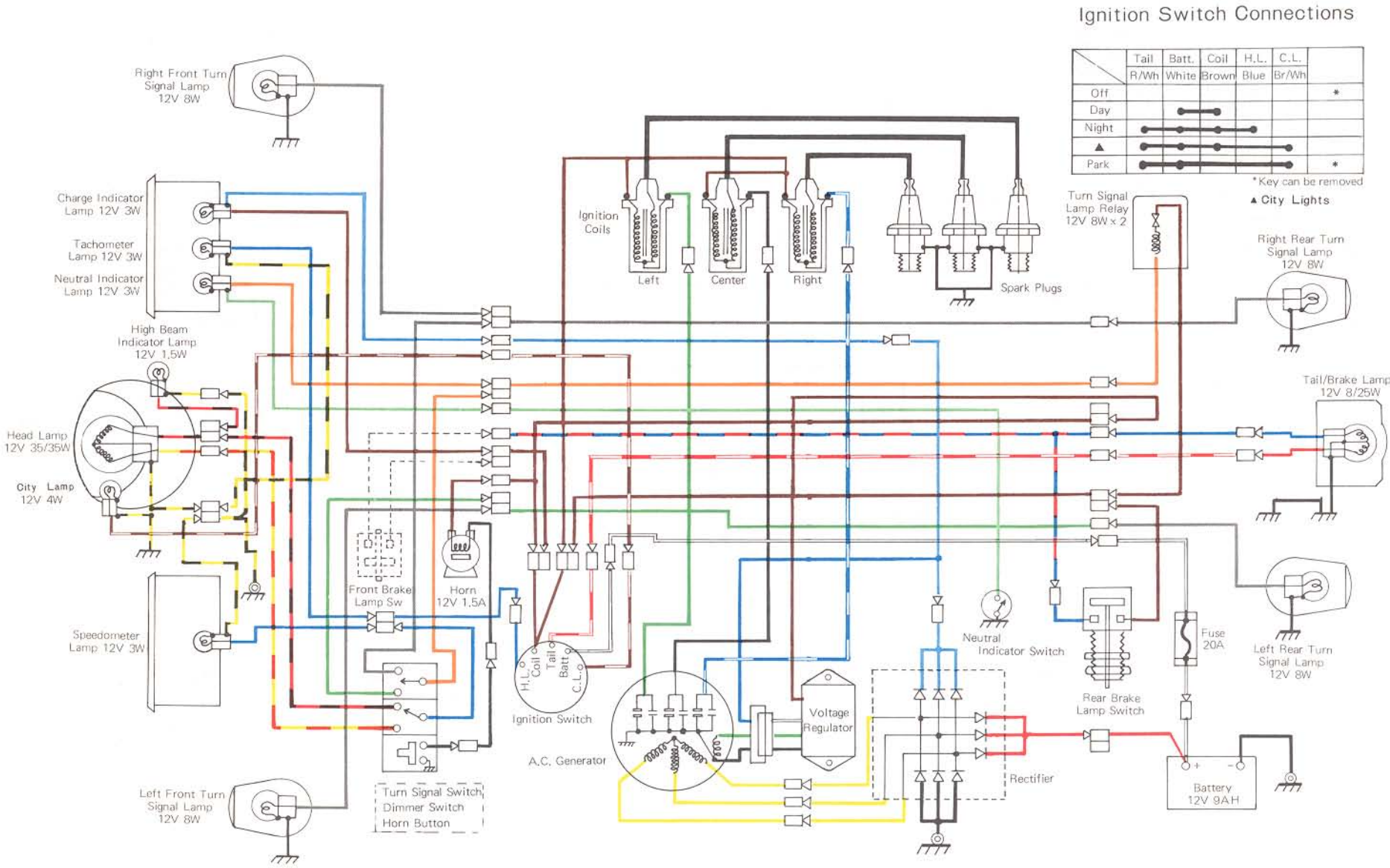
H1 Wiring Diagram

CDI Model



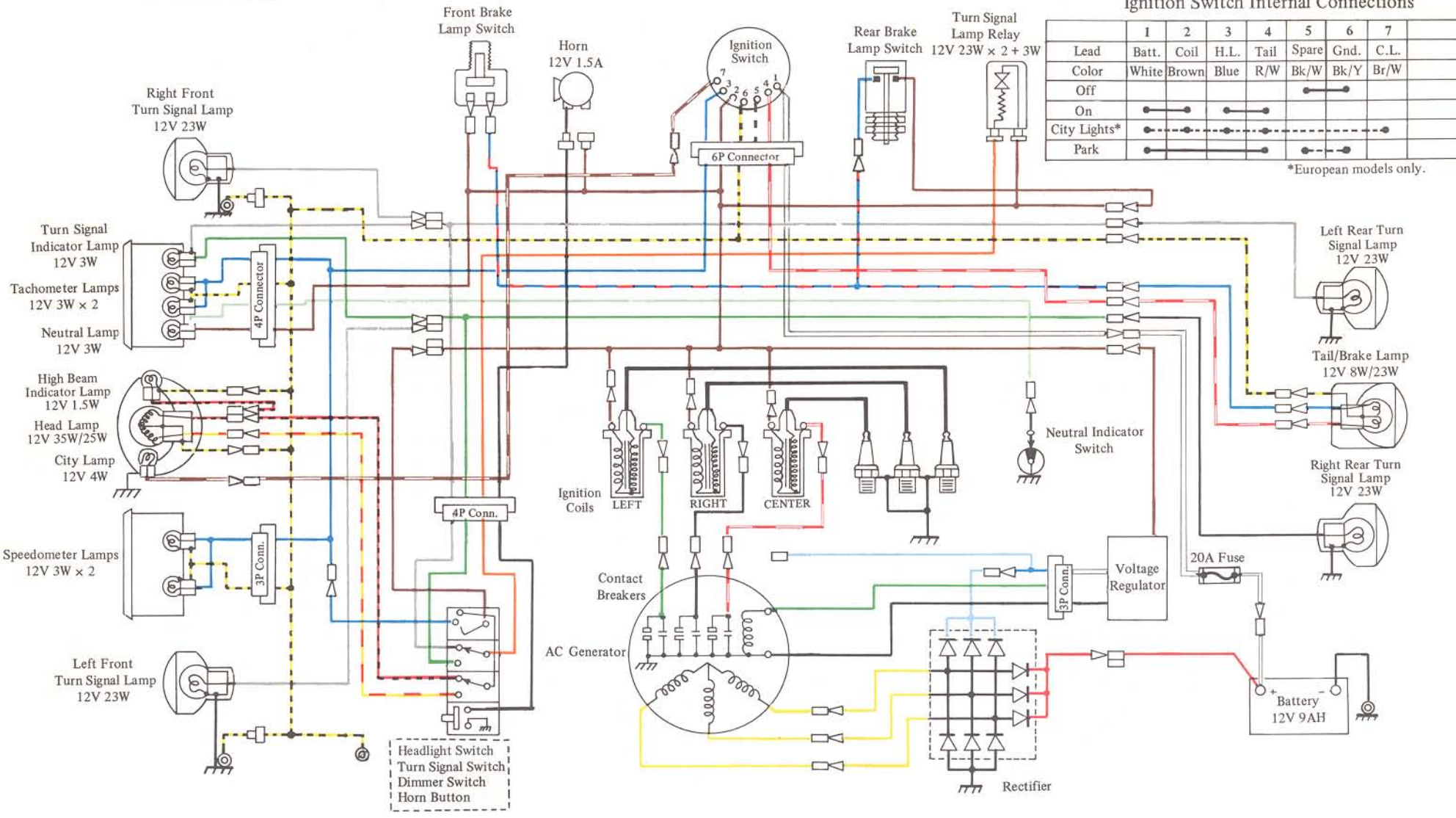
H1 Wiring Diagram

European Model, through 1971



H1 Wiring Diagram

Disc Brake Model

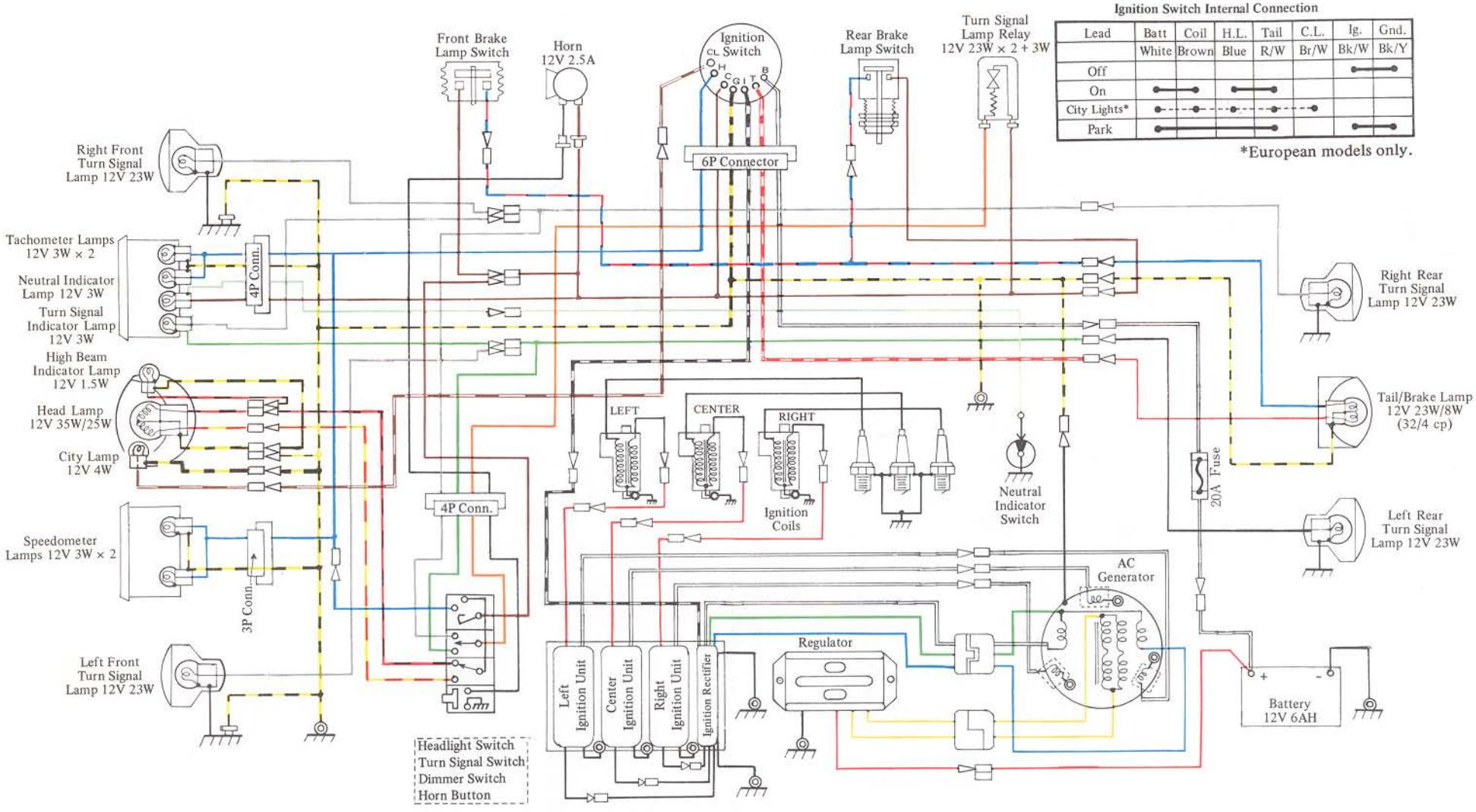


Ignition Switch Internal Connections

	1	2	3	4	5	6	7
Lead	Batt.	Coil	H.L.	Tail	Spare	Gnd.	C.L.
Color	White	Brown	Blue	R/W	Bk/W	Bk/Y	Br/W
Off					●	●	
On	●	●	●	●			
City Lights*	●	●	●	●			●
Park	●			●	●	●	

*European models only.

H2 Wiring Diagram



Ignition Switch Internal Connection

Lead	Batt	Coil	H.L.	Tail	C.L.	Ig.	Gnd.
	White	Brown	Blue	R/W	Br/W	Bk/W	Bk/Y
Off						●	
On	●		●				
City Lights*	●		●	●			
Park	●			●		●	

*European models only.