



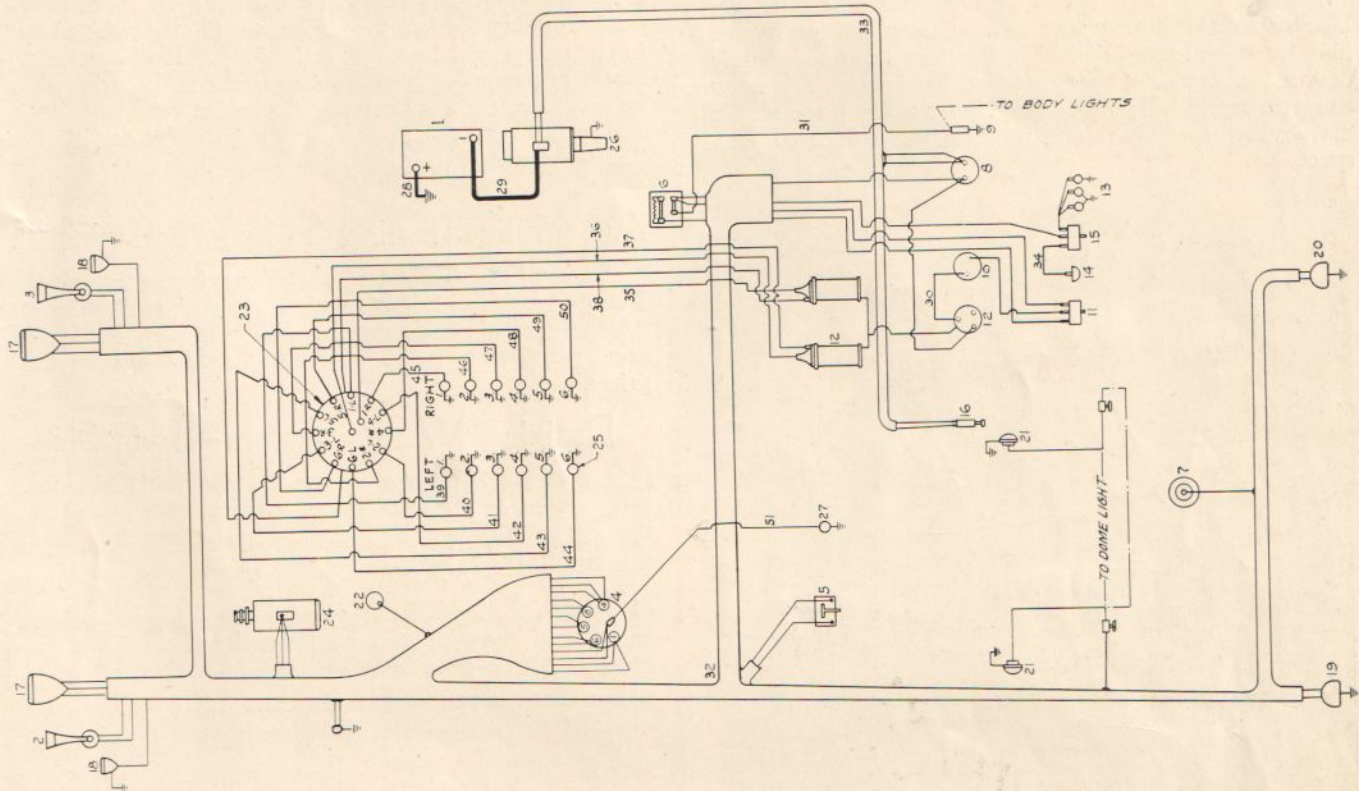
STANDARD SIZES AND ADJUSTMENTS
905 — TWIN SIX — 906

Name	905-906	Name	905-906
BRAKE—FRONT		COOLING SYSTEM	
Clearance around drum	Free	Capacity	11 1/2 Gals.
Length of Lining	Prim.—14" Sec. —17 1/2"	Gravity Flow of Water Through Radiator per Min.	75 Gals.
Width and Thickness	2" x 3/16"	Clearance Fan to Radiator core	1 1/8"
No. per Vehicle	Prim.—4" Sec. —2"	Thermostat Temp. at which Valve Starts to Open	155° F
BRAKE—HAND		Fan Belt	45° V-type
Clearance around drum	Free	Length and Width	49 1/2" x 1"
Setting Bands Concentric	Inherent	Fan Belt Adjustment	Loosen generator support. Attach spring scale to generator, pull out to 180 lbs. reading and tighten nuts.
Length of Lining	Prim.—14" Sec. —17 1/2"	Range of Belt Adjustment	1 1/4"
Width and Thickness	2" x 3/16"	GASOLINE SYSTEM	
No. per Vehicle	Prim.—4" Sec. —2"	Tank Capacity	25 Gals.
BRAKE—REAR		Inside Diameter of Inlet Manifold at Flange—(Duplex—each barrel)	1 1/8"
Clearance around Drum	Free	ELECTRICAL SYSTEM	
Length of Lining	Prim.—14" Sec. —17 1/2"	Generator Charging Rate	9-11 Amps. Automatically Controlled
Width and Thickness	2" x 3/16"	Battery Capacity—Ampere Hours	160 Amp. Hrs. 6-7 Volts
No. per Vehicle	Prim.—4" Sec. —2"	Lamp Bulbs, Bayonet Lock Type, Headlight	Up. Filament 21 C. P. Low. Filament 21 C. P. Double Contact
CLUTCH		Dimmer or Auxiliary	None
No. of Driving Plates	2	Instrument Light and Side Light	3 C. P.
Clearance Plates on Keys—Minimum	Clearance Splined Hub on Clutch Shaft No Perceptible Back Lash	Stop Light	21 C. P.
Tension of Clutch	12 springs 115 lbs. at 1 1/8"	Tail Light	3 C. P.
Clutch Pedal to Toeboard Clearance—Clutch Engaged	1 1/2"	Dome Light	6 C. P.
		Fender, Cowl or Courtesy Lamp	3 C. P.
		Spark Timing	Adv. Occurs 7° B. T. D. C.
		Breaker Point Gap	.020
		Spark Plug Gap	.025

STANDARD SIZES AND ADJUSTMENTS—Continued

Name	900	Name	900
MOTOR		REAR AXLE	
Compression	95-100 Lbs.	Oil Capacity	3 1/2 Qts.
Firing Order	1R-6L-5R-2L-3R- 4L-6R-1L-2R-5L- 4R-3L	Back Lash Between Driving Ring Gear and Pinion—Minimum	.004
Front End Chain 1 1/2" Wide, 1/2" Pitch, No. of Links	56	SPRINGS	
Front End Chain	Not Adjustable	Front Springs Nominal Cap. in Lbs. When in Normal Position	Rt.—1050 #—325 rate Lt.— 950 #—325 rate
Camshaft End Thrust	.002-.006	Rear Springs Nominal Capacity in Pounds When in Normal Position	570—1200 #—165 rate 571—1100 #—145 rate 581—1100 #—145 rate 573—1300 #—145 rate 583—1200 #—145 rate 574—1400 #—145 rate 575—1400 #—145 rate 576—1300 #—145 rate 577—1200 #—145 rate 578—1200 #—145 rate 579—1200 #—145 rate 587—1200 #—145 rate
Clearance to Bearings	Min. .001		
Clearance Piston Pin Bushing to Pin— Minimum	Palm Push Fit at 160° Heat		
Clearance Bearing to Crankpin	Min. .0005		
End Play Connecting Rod on Crankshaft	Min. .008		
End Play Connecting Rod on Piston Pin— Nominal	1/16"		
Diameter of Crankpins	2 1/2"		
Clearance on All Main Bearings	Min. .001		
End Play Crankshaft on Main Thrust Bearing	Min. .003		
Diameter of Main Journals	2 3/4"		
Diameter Cylinder Bore—Standard	3 1/8"	STEERING	
Reground Oversizes	.015-.030-.045 Over Std.	Front Wheel Camber	1° 30'
Diameter of Piston Pins	7/8"	Front Wheel Toe-In	1/8"
Oversizes	.003 and .006 Over Std.	Castor	1° Min. 2° Max.
Piston Pin Offset in Piston	0	Adjust Knuckle Stop	Adjust to 4 1/2" Clearance Spring to Wheel Rim
Install in Motor	Slots on Valve Side	Minimum Turning Radius	905—26' 2" 906—27' 2"
Width of Ring Groove	Comp. 1/8" Oil 3/32"	Taper Roller Bearing Adjustment for Front Wheel	Tighten Nut as Tight as Possible then Back Off 1/2 Turn or More and Lock
Depth of Ring Groove	.158	Recommended Tire Pressure	Front—40 Lbs. Rear—40 Lbs.
Clearance Piston Skirt to Cylinder Wall	Minimum: —.0015	Shock Absorber Adjustment	Front Rebound Valve—1C Rear Rebound Valve—5G Front Comp. Valve—G4X Rear Comp. Valve—G2X
Piston Ring Gap Compressed to Cylinder Diameter	Seven-thousandths	Balancing Wheels	Wheels Equipped with Balloon Tires Should be in Static Balance
Pressure Required to Close Ring to Correct Gap	Comp. 6 1/2 Lbs. Min. Oil 4 3/4-7 1/2 Lbs.	TRANSMISSION	
Piston Sizes	Standard .003 .005 .010 .015 .020 .030 .045 over	Oil Capacity	2 1/4 Qts.
Clearance to Push Rods—Motor Warm	None Automatic take up	Ratio to Rear Wheels in Direct Drive	4.41-1 4.69-1 5.07-1 4.07-1
Valve Silencer Piston Fit in Bracket	.0015-.0025	In Second	6.74-1 7.15-1 7.63-1 6.2-1
Width of Contact at Valve Seat	.062	In First	10.86-1 11.53-1 12.49-1 10.01-1
Clearance Between Valve Stem and Guide	In. Min. .0025 Ex. Min. .005	In Reverse	12.71-1 13.5-1 14.61-1 11.72
Tension of Valve Springs	70 Lbs. at 2 1/2"	Back Lash Between Helical Gears Always in Mesh	.010
Oil Pump Pressure	Max. 55 Lbs.	UNIVERSAL JOINT	
Crankcase Oil Capacity	10 Qts.	Assembling Universal Joints	Arrows on Shaft and Universal Joint Sleeve must be in line
Rod Clearance to Surface of Oil in Crankcase	Front—2 1/4" Rear—1 1/8"		
Valve Timing	00's on Crankshaft and Camshaft Sprockets Should be Nearest together on Center line		

STANDARD SIZES AND ADJUSTMENTS—Continued



ELECTRICAL (See Wiring Diagram)

Piece	Name	No. 905	Required 906	Name	Bulk Stock No. of Cable	Cable Length Inches	Terminal	Insulator
1	191246 Electrical battery	1	1	30	Electrical—coil switch to gasoline and oil gauge cable	166404	13½	33287 36111
2	202393 Electrical horn—left	1	1	31	Electrical—cigar lighter to fuse block cable	166400	25½	33287 201710 36111
3	202394 Electrical horn—right	1	1	32	Electrical—wiring left assembly (905)	202971		
4	178009 Electrical steering gear lighting switch assem.	1	1	32	Electrical—wiring left assembly (906)	202972		
5	190885 Electrical stop light switch	1	1	33	Electrical—wiring right assembly	203126		
6	202176 Electrical wiring fuse block assembly	1	1	34	Electrical wiring reading light to switch cable	166404	16	
7	201223 Gasoline tank gauge assembly	1	1	35	Motor ignition coil to distributor high tension cable—right	78396	37	156625 156626
8	201208 Instrument board ammeter	1	1	36	Motor ignition coil to distributor high tension cable—left	78396	35	156625 156626
9	197488 Instrument board cigar lighter	1	1	37	Motor ignition coil to distributor low tension cable—left	166404	34	33287 36111
10	201195 Instrument board gasoline or oil gauge	1	1	38	Motor ignition coil to distributor low tension cable—right	166404	40	33287 36111
11	197492 Instrument board gasoline or oil gauge switch	1	1	39	Motor ignition high tension cable to spark plug No. 1—left	78396	18	156625 156626
12	202908 Instrument board ignition coil and switch assembly	1	1	40	Motor ignition high tension cable to spark plug No. 2—left	78396	16½	156625 156626
13	202898 Instrument board light sockets and cable assembly indirect	1	1	41	Motor ignition high tension cable to spark plug No. 3—left	78396	26	156625 156626
14	187295 Instrument board light—direct (reading light)	1	1	42	Motor ignition high tension cable to spark plug No. 4—left	78396	28½	156625 156626
15	197532 Instrument board light switch	1	1	43	Motor ignition high tension cable to spark plug No. 5—left	78396	36	156625 156626
16	201511 Instrument board starter motor switch	1	1	44	Motor ignition high tension cable to spark plug No. 6—left	78396	36	156625 156626
17	201119 Lamp front assembly	2	2	45	Motor ignition high tension cable to spark plug No. 1—right	78396	15	156625 156626
18	202429 Lamp fender assembly	2	2	46	Motor ignition high tension cable to spark plug No. 2—right	78396	22	156625 156626
19	186320 Lamp rear left	1	1	47	Motor ignition high tension cable to spark plug No. 3—right	78396	26½	156625 156626
20	186321 Lamp rear right	1	1	48	Motor ignition high tension cable to spark plug No. 4—right	78396	30½	156625 156626
21	194669 Lamp running board	2	2	49	Motor ignition high tension cable to spark plug No. 5—right	78396	33½	156625 156626
22	203016 Motor crankcase oil gauge and float assembly	1	1	50	Motor ignition high tension cable to spark plug No. 6—right	78396	39	156625 156626
23	203013 Motor distributor	1	1	51	Steering post horn button to horn cable assembly			
24	203025 Motor generator	1	1					
25	202635 Motor ignition spark plug	12	12					
26	201234 Motor starter motor and switch assembly	1	1					
27	203772 Steering post horn button	1	1					

CABLES (See Wiring Diagram)

Name	Bulk Stock No. of Cable	Cable Length Inches	Terminal	Insulator
28 Electrical—battery to ground cable assembly	191167			
29 Electrical—battery frame junction to motor starter switch cable	157432	21	(127279) (140076)	184988

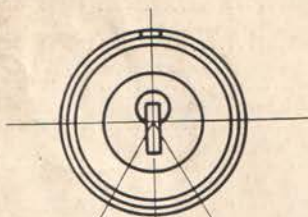
Service in Charlotte

A short time ago Mr. Upchurch moved the C. W. Upchurch & Company into new quarters, taking over a five story building of which the first floor is entirely devoted to service of the super-station variety. The show room is centrally located on the first floor, three stories are devoted to storage and the remaining floor to shop space.



Mr. S. P. Carter, with ten years of Packard service experience, is holding forth in the new quarters as Service Manager. With an up-to-date type of service and a close contact with all owners in their territory, we should receive some very interesting reports from this point. We still firmly believe that "Service that pleases, is Service that pays."

Ignition Key Positions



STARTIX IGN. OFF IGN. & GAS GA.
& GAS GA.

On a standard Twin Six the ignition can be turned on and the gasoline gauge cut in by rotating the key to either the right or left. On a car equipped with automatic starting the key should be turned clockwise to cut in the starter and turn on the ignition. If you desire to ascertain the quantity of gasoline in the tank with motor not running, turn key counter-clockwise.

The key can only be removed from the switch in the "off"—or vertical position.

Automatic Starting Switch for Twin Six

A special starting switch equipment is required on the Twin Six. The piece number of this equipment is PA-646 and the suggested list price installed is \$15.00. See Trade Letter T-2571 for Distributers' and Dealers' prices.

Draining Water System—Twin Six

In draining the water system on the Twin Six, it is necessary to drain the radiator, both cylinder blocks and the expansion tank between the right running board splasher and the frame.

A few of the first Twin Sixes' were shipped with plugs on the sides of the cylinder block instead of petcocks, and these plugs may be replaced with the petcocks which are now being used.

For each car you will require:

2-203976 Motor Cylinder Water Jacket Drain Cock.

Hub Cap Noise—900

Several Distributers have reported to us a noise in the Light Eight which appeared to come from the differential gears or bearings, but which could not be identified at either of these two points.

This noise actually has developed in the hub caps. It is confined to cars equipped with disc wheels, and is caused by the resonant quality of the hub cap. If rear axle noise is suspected in a Light Eight which is disc wheel equipped, the first step should be to remove the hub caps to see whether this eliminates the sound.

It can be corrected by anything which will deaden the hub cap and remove its bell like quality. In the factory a flat band spring is now being wrapped with electricians' tape and slipped through the small diameter of the hub cap so that it is held in the small outer compartment and presses outward against the inside of the cap.

These springs may be ordered from us if you so desire. You will require for each wheel:

1-203990 Wheel Hub Cover Liner Retainer.

NOTICE

We are advancing the mailing date on the next few issues of the Service Letter so that we may pass on information on the Twin Six just as promptly as we receive it. For reference purposes the regular issuing date will be retained.

EDITOR

We Welcome Suggestions and Inquiries from Packard Service Men. Address All Communications Care Editor, Packard Service Letter.