

Headlight Assembly
1939 Hudson 112 Model 90/98
Written by: Rick Clark

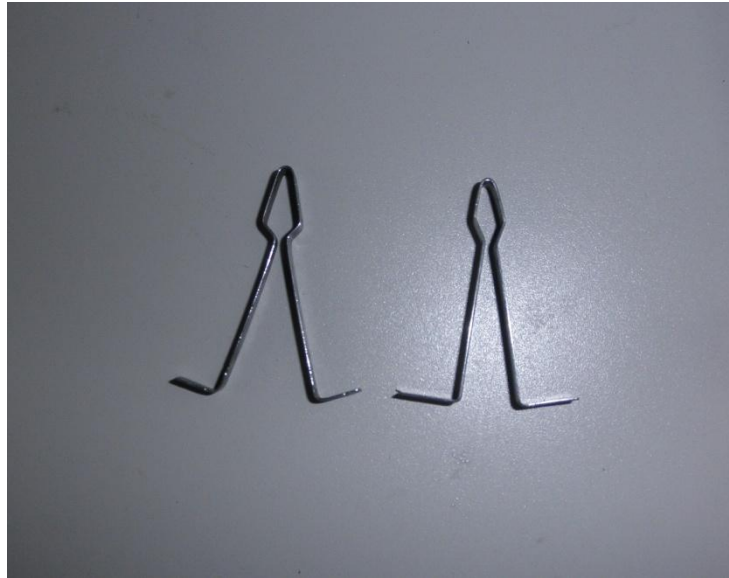
This is a 'work in progress', and is the first time I have assembled a 1939 Hudson headlamp bucket. It is a documentation of my research into the components and replacement or alternative parts, which will be mentioned as I go through the steps in assembly.



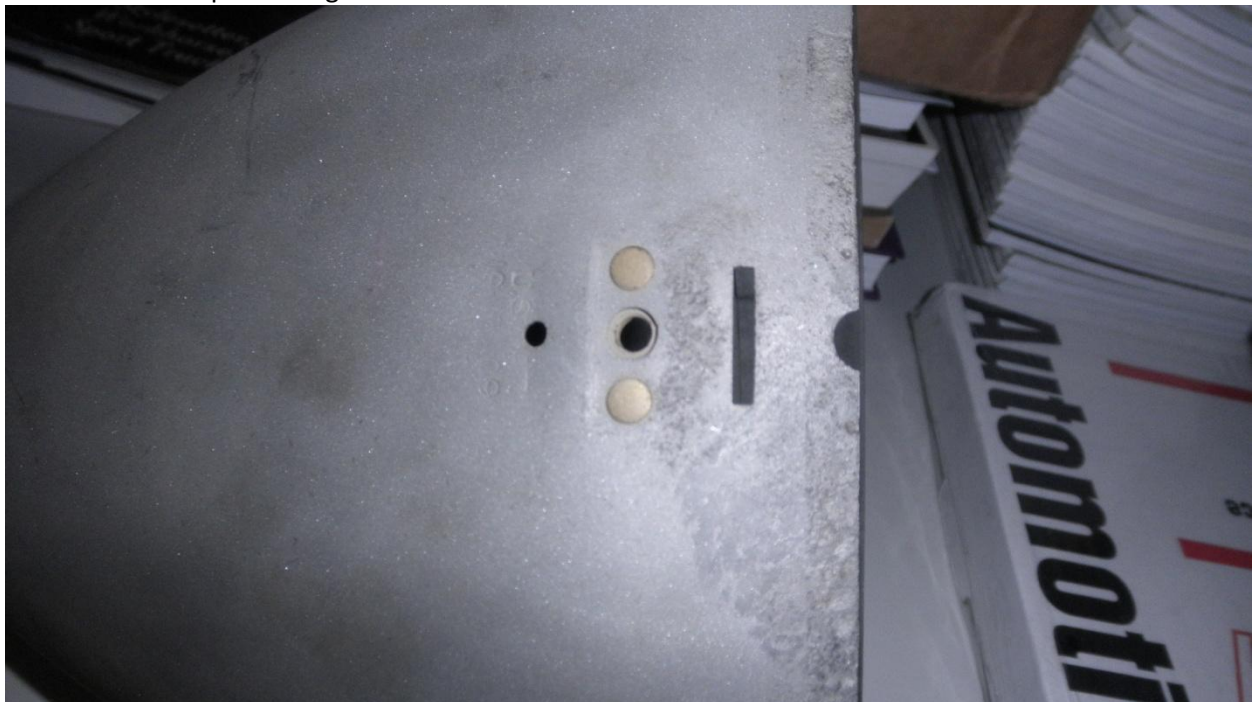
Here is a line-up of the smaller components which hold the lens reflector and lens in place. The springs are off-the-shelf springs, which can be found in most hardware stores (may take a bit of looking). At the bottom you will note the older retaining screws, which are not really usable. To replace them, I am using common 10-32x3/4" screws (you may use stainless steel screws if you prefer).



Before I go further, I have an important note. The aftermarket has these clips - headlamp reflector spring seat clips (as shown below). Be aware that there are different types, with a distinct difference in the size of the 'head'. The clip with the larger head (the one on the left) is the correct clip. This is easily determined by inserting the clip into the headlamp reflector spring seat bracket (with rectangular hole and a 'seat' for the spring), and turning it ¼ turn. If the clip slips out of the retaining bracket, it is the wrong one – it should turn and 'lock-in'.



Hole for Headlamp retaining bracket and screw –



Picture of headlamp retaining bracket and screw installed –



Another view of headlamp retaining bracket installed with screw –



Picture of Headlamp Reflector Spring Seat(s) installed with the Springs. You will need to compare the mounting points in the buckets with the square slots in the reflector – and ‘sight by eye’ which seats go into which slots in the headlamp (the other slot in each adjacent area will hold the Headlamp Reflector Stop). There is only one ‘right way’, so this may take a bit of trial and error.



The headlamp, now with the Headlight Reflector Stops installed. Please note that the top of the picture is also the top of the headlamp (this is the right-side bucket).



The headlamp reflector. Please note that the light sockets are installed. The reflector is in need of being re-silvered or possibly chromed. The light sockets installed in the reflector are 38-39 Ford units, which fit perfectly for this situation. Note: These sockets are cheap reproductions (bought over the internet, in error), and are not worth the trouble (I am only using them for this 'trial fit' and article) – be sure to get quality reproduction sockets, which are readily available. Probably best bought at a show or in person.



The headlamp bucket, with headlamp reflector installed. As a matter of note, I found it easier to assemble the Headlamp Reflector Seat with the spring and the Headlamp Retainer Clip on the reflector, and then insert the entire assembly (reflector and all) into the bucket. Took a bit of maneuvering (and a narrow piece of metal) to properly seat all three assemblies into the bucket, however with patience it can be done.



Cork gasket material (1/16" thick). I used some 2-sided poster tape as an adhesive to keep the cork in place (worked well), and cut the combination into a strip about 5mm wide & 24" long (had about 1 1/2" left over). Keep a razor handy to trim as necessary, until you get a good fit. You might also use foam padding as a gasket (not tried or tested).



Headlamp and reflector assembly with the cork gasket installed –



The lens sits easily on the reflector, with the rim of the reflector seating and sealing the lens. The original headlamp buckets had a stainless steel strip around the rim. This added some 'flash' to the bucket, as well as a bit of area to the rim, seating against the lens and combined with the retaining bracket, held the lens in place (when the screw was tightened).

However, here is where the installation made a 'left turn' (so to speak). The stainless piece is long gone. What you are looking at is door edge trim molding (about 24" is sufficient). I started at the bottom, and worked my way around the rim. The first half is easy, however it will require a bit of determination to get it properly seated all the way around. Once it is in and seated, the last bit can be trimmed, for an almost invisible seam.



Notes:

The lens has a 'TOP' (lens is marked). There is also a small extrusion 'dimple' in the bottom of the lens, which fits into an indentation cut out of the bottom of the bucket – probably to keep the lens from rotating while seated in the bucket.

The door edge trim used is a common piece. This is made by Cowles Products, and is 'Reduced Door Edge Chrome Wrap' part number 39-320. I bought a 25' roll for about \$15.00 + shipping.

The 'finished product' - Again, please note that this was for demonstration purposes only. The bucket requires work, the reflector needs to be re-silvered, and no bulbs were installed in the sockets.

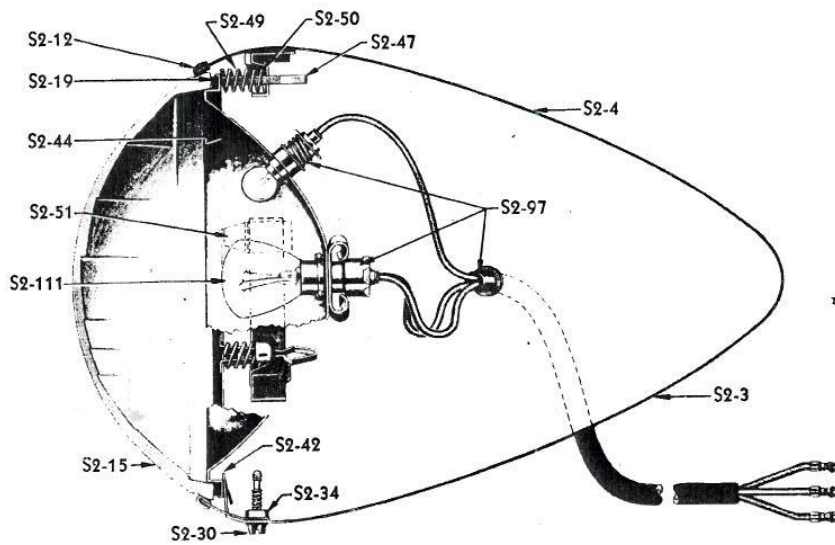


The 'finished product', from another angle –

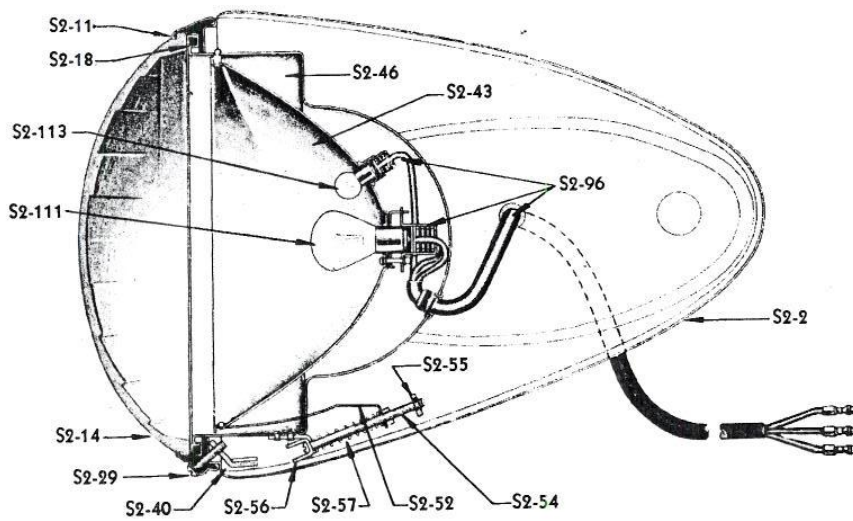


Parts listing for Headlight Buckets, from: Hudson Master Chassis Group Parts Book, 1930-1939 Inclusive

Plate	Diag No.	Part No.	Quantity	Part Name	Specifications	Personal Notes
57	S2-3	BO 130244	1	Headlamp Body Assembly	Right - Black for Lamp 130230	Set #1, Right (only need one set - a Left and a Right)
		BO 130245	1	Headlamp Body Assembly	Left - Black Lamp for 130231	Set #1, Left (only need one set - a Left and a Right)
		BO 130246	1	Headlamp Body Assembly	Right - Prime or Lacquer for 130232	Set #2, Right (only need one set - a Left and a Right)
		BO 130247	1	Headlamp Body Assembly	Left - Prime or Lacquer for 130233	Set #2, Left (only need one set - a Left and a Right)
	S2-4	BO 136550	1	Headlamp Body Assembly	Right - Black for Lamp 134900	Set #3, Right (only need one set - a Left and a Right)
		BO 136551	1	Headlamp Body Assembly	Left - Black Lamp for 134901	Set #3, Left (only need one set - a Left and a Right)
		BO 136552	1	Headlamp Body Assembly	Right - Prime or Lacquer for 134902	Set #4, Right (only need one set - a Left and a Right)
		BO 136553	1	Headlamp Body Assembly	Left - Prime or Lacquer for 134903	Set #4, Left (only need one set - a Left and a Right)
		BO 136926	1	Headlamp Body Assembly - Second Type	Right - Prime or Lacquer for 134902	Set #5, Right (only need one set - a Left and a Right)
		BO 136927	1	Headlamp Body Assembly - Second Type	Left - Prime or Lacquer for 134903	Set #5, Left (only need one set - a Left and a Right)
	S2-12	BO 130248	2	Headlamp Door or Rim Assembly	For Lamps 130230-1-2-3, 136902-3	
	S2-15	BO 130609	2	Headlamp Lens	Riteway - for Lamps 130230-1-2-3, 136902-3	
	S2-19	BO 130253	2	Headlamp Lens Gasket	For Lamps 130230-1-2-3, 136902-3	
	S2-30	BO 130256	2	Headlamp Lens Retainer Screw	For Lamps 130230-1-2-3, 136902-3	
	S2-34	BO 130257	2	Headlamp Lens Retaining Screw Nut and Rivet	For Lamps 130230-1-2-3, 136902-3	
	S2-42	BO 130255	2	Headlamp Lens Retaining Screw Bracket, rivet and Spring	For Lamps 130230-1-2-3, 136902-3	
	S2-44	BO 130606	2	Headlamp Reflector Assembly	For Lamps 130230-1-2-3, 136902-3	
	S2-47	BO 129063	6	Headlamp Reflector Spring Retainer-Upper	For Lamps 130230-1-2-3, 136902-3	Type #1 (only need six, type #1 or type #2)
		BO 109265	6	Headlamp Reflector Spring Retainer-Upper	For Lamps 130230-1-2-3, 136902-3	Type #2 (only need six, type #1 or type #2)
	S2-49	BO 109266	6	Headlamp Reflector Spring-Upper	For Lamps 130230-1-2-3, 136902-3	Type #1 (only need six, type #1 or type #2)
		BO 109285	6	Headlamp Reflector Spring-Upper	For Lamps 130230-1-2-3, 136902-3	Type #2 (only need six, type #1 or type #2)
	S2-50	BO 130251	6	Headlamp Reflector Spring Seat-Upper	For Lamps 130230-1-2-3, 136902-3	
	S2-51	BO 130249	6	Headlamp Reflector Stop	For Lamps 130230-1-2-3, 136902-3	
	S2-97	BO 130600	1	Headlamp Cable Assembly	Right - For Lamps 130230-1-2-3, 136902-3	
		BO 130601	1	Headlamp Cable Assembly	Left - For Lamps 130230-1-2-3, 136902-3	
	S2-111	BO 71636	2	Headlamp Bulbs	Mazda #2331	
	S2-113	BO 71550	2	Parking Light	Mazda #55	Shown on diagram, not numbered/identified (?)



Headlamp—Hudson 112



Headlamp—1938 Hudson-Terraplane