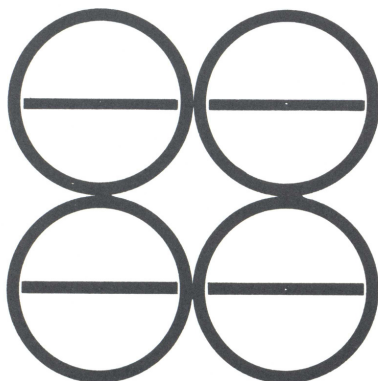


**MASTER  
TECHNICIANS  
SERVICE  
CONFERENCE**


**MEETING  
GUIDE 69-9**




**FINER  
POINTS  
OF  
FOUR-  
BARRELS**

**PLYMOUTH  
DODGE  
CHRYSLER  
IMPERIAL  
DODGE TRUCK**





**ROUND 'EM UP  
FOR THE  
FINER POINTS  
OF  
FOUR-BARRELS**



I'm sure you remember that last month's session was loaded with double-barreled carburetor facts. This month's session will give you and your men some answers you've been looking for about four-barrel carburetors. You should remember also, that the majority of all carburetor problems your men are exposed to are caused by dirty, sticking external linkages or incorrect external adjustments.

I'm sure the four-barrel carb doesn't scare you and it shouldn't scare your crew, either. Just because it has twice as many barrels doesn't mean that it's twice as complicated. And it's your job to convince 'em. The problems and causes are basically the same as the two-barrels; although the remedies and physical adjustments may be a little different. The secondary portion also requires some adjustments for good performance. If your men read the Reference Book very carefully, they shouldn't have any trouble ironing out any problems they may come across.

This session covers two different carbs—the Carter AVS and the Holley. All the external adjustments on the AVS are covered first, then the same thing is done on the Holley. Some additional internal service and assembly procedures are covered on the Holley. Your Master Technicians will find a lot of extra information in this month's Reference Book that we didn't have time to cover in the film, so encourage them to read it thoroughly.

## PREVIEW and REVIEW

You're probably pretty much familiar with most of the material covered in this month's session. Still, it's a good idea to preview the film before showing it to your men. If possible, take time to read the Reference Book, too. You notice I said you'd be familiar with *most* of the material. That's because there is some brand-new information on the new model carburetors and the ways to remedy some of the problems you may be having with the Holley. As for the finer parts of checking and making the standard adjustments, it never hurts to review them occasionally.

### Parts, Props, and Printed Matter

Carburetor improvements and changes frequently mean another piece of linkage and another adjustment. Nothing could be more helpful to you than to have one of each carburetor covered in the film, both early- and late-production models, on hand for your meeting. Have the Service Manuals handy, too. Encourage the use of the Manuals and the Service Bulletins as reference to the specifications instead of adjusting by trial and error or "by the seat of their pants".



## Y'ALL COME, HEAH!

Pick a date well in advance and post the day and time around the shop to round up as many technicians as possible for this month's review.

Try and get everyone from last month's session to attend this one so they'll have the lowdown on four-barrels as well as the two-barrels. This is the time of year when people are gonna want to get their cars ready for vacation trips. And this means they'll want the best possible performance and economy.



## SWING YOUR PARTNER

Try and swing your best carburetor technician to be your partner when setting up the meeting. Have him there when you review the film and Reference Book. He's probably got ideas about a few things he feels should get a little special attention at the meeting.



## TWO BY TWO

You know there's two sides to this record that will take about twenty-two minutes to move the film through the projector. There's also two carburetors covered in this month's session—the Carter AVS, and the Holley. And . . . the best number of times to run through the film is also two. After the first showing, rethread the film through the projector. This way you can take a look at any frame that comes under discussion. After you're through with the discussion period, move the show out into the service area.



## DOUGH-SEE-DOUGH

As usual, the back of the Meeting Guide has a little quiz for your men. Really, it's just another way of reviewing some of the more important points covered in the Reference Book. If they've read the Reference Book carefully, it should be a snap for them to come up with the right answers. Incidentally, the first half of the quiz is on the AVS; the second half is on the Holley. As an incentive for them to really study the Reference Book, you might remind them that with summer coming, a lot of people will want their car to purr like a kitten before taking that vacation trip. Carburetor adjustments go a lot smoother and faster if you know what you're doing; and for your technicians, that can mean a little extra dough, see?



- 1.** Resetting the choke coil unit is the first thing to do if warmup performance is poor.

**WRONG . . .** The choke coil unit is virtually trouble-free and very seldom needs service or replacement. The choke setting should not be changed in an attempt to correct some other service problem. (Page 1)
- 2.** When adjusting the accelerator pump stroke, there are two adjustments to make and one should be done before the other.

**RIGHT . . .** The accelerator pump and bowl vent are both operated by the same lever but must be adjusted separately. The accelerator pump adjustment affects the bowl vent opening so should be done first. (Page 3)
- 3.** Too much tension on the secondary air valve will cause a rich mixture as the valve opens. Too little tension doesn't affect performance.

**WRONG . . .** Too little tension allows the air valve to open too soon when the throttle valves are opened quickly. If the air valve opens too quickly, you don't get that increase in vacuum to start fuel flow in the secondary nozzles. This can cause a hesitation, flat spot, or even backfire, from a lean mixture. (Page 5)
- 4.** It is very important to always adjust the idle speed and mixture screws  $\frac{1}{16}$  turn at a time and to watch the exhaust analyzer very closely.

**RIGHT . . .** The exhaust analyzer is so sensitive that the ratio must be changed in very small increments. So, never turn the mixture screw more than  $\frac{1}{16}$  at a time. Each time you turn the screw, wait ten seconds before reading the meter. (Page 6)
- 5.** The procedure to balance the mixture for the primary bores is exactly the same on the early production models as on the late models.

**WRONG . . .** The procedure is the same as on the late model jobs with the exception of one thing. Seat the single idle mixture screw and then turn it three-quarters of a turn clockwise before adjusting the limiter screws. (Page 7)
- 6.** There is no set procedure for making carburetor adjustments, so it's a toss-up as to which one to do first.

**WRONG . . .** Before making any adjustments on the Holley four-barrel carburetor, the choke control lever must be qualified. Qualifying the choke control lever is a starting point for any other adjustments which may have to be made. (Page 7)
- 7.** Everything about the vacuum kick unit on the Holley carburetor is the same as on the AVS.

**WRONG . . .** It does the same job, the same way; and is also adjusted the same way. The correct amount of choke opening is different from the AVS, so check your Service Manual. (Page 8)
- 8.** The fast-idle speed for the 383 application is different than the 440, so don't use the fast-idle speed listed in the Service Manual.

**RIGHT . . .** The Manual was printed long before the Holley was available on the 383's. The fast-idle speed for the 383 application is a bit lower at 1500 r.p.m. than the 1600 setting for the 440. (Page 9)
- 9.** Adjust the fuel mixture on the lean side so that a slight decrease in idle speed is noted on the tachometer.

**RIGHT . . .** When the air cleaner is installed, the idle speed should increase to the maximum speed obtainable by fuel mixture adjustment. If the speed decreases, the idle mixture is too rich and should be readjusted. (Page 11)
- 10.** Due to gasket deterioration and shrinkage, re-torquing the fuel bowl screws on the Holley may eliminate idle instability.

**RIGHT . . .** Gaskets are critical on Holley carburetors because they perform a sealing function whereas on other carburetors, this may not be the case. (Page 12)

Make sure that your men receive credit for this session. Fill out and return the PARTICIPATION REPORT which replaces the individual questionnaires.