



PARTS PRO SALESMAN



CLASSIC EDITION #11



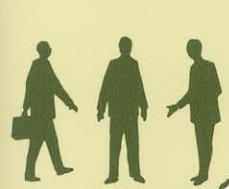
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Professional Parts
Salesman

1 2 3 4 5
6 7 8 9 10
11 12 13

Update Your 855




FOREWORD

The concept of aftermarket technology and especially uprate is an exciting way to do business. It enables us to continually improve and increase the value of a Cummins engine.

This program is designed to explain the benefits of uprating the NT Small Cam and Big Cam I engines with the latest Big Cam II technology to aid you, the Professional Parts Salesperson, in making those sales.

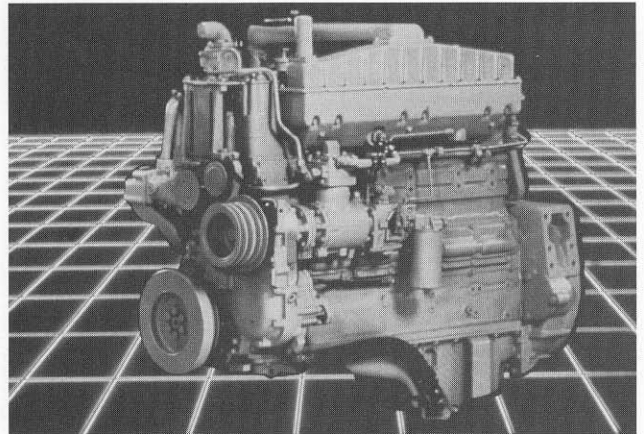
1. Uprate Your 855.



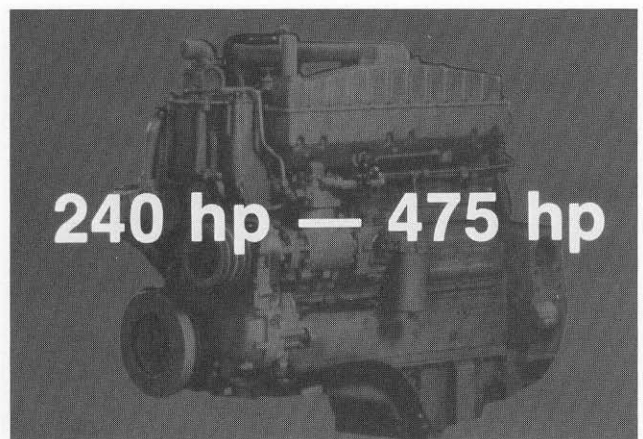
**855
Uprate**

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2. **NARRATOR:** The NT 855 is truly a remarkable engine. Over the years, it has established a solid reputation for reliability and durability while at the same time being constantly improved to incorporate new technological advances.



3. The 855 has not only maintained a high degree of parts interchangeability, but a unique flexibility which enables it to be easily adapted to the customer's specific power requirements. And, when those requirements change, the 855 changes too.

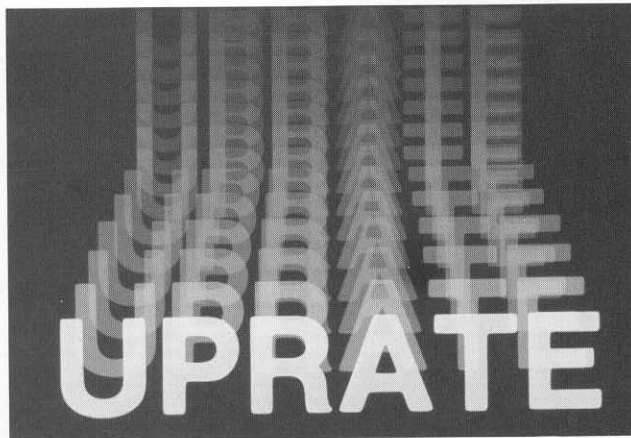


4. With its long years of service, the 855 can easily be moved up or down in horsepower to provide the customer with the fullest possible utilization of his equipment.





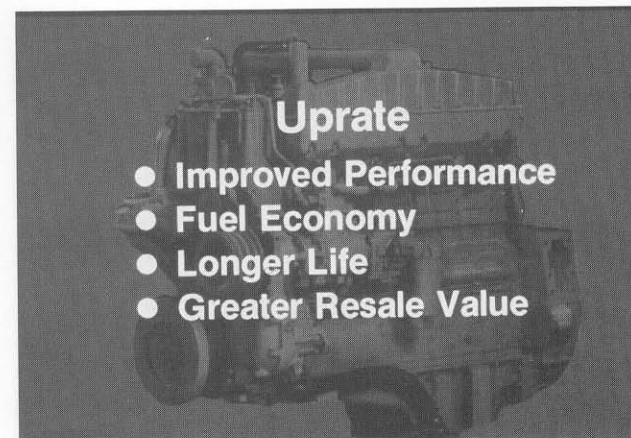
5. But today with lower speed limits, rising fuel costs, and higher interest rates, customers need better performance, greater fuel economy, and longer service life.



6. Now, for the first time it is possible for your customers to uprate their present NT Small Cam and Big Cam I engines with the latest Big Cam II technology.

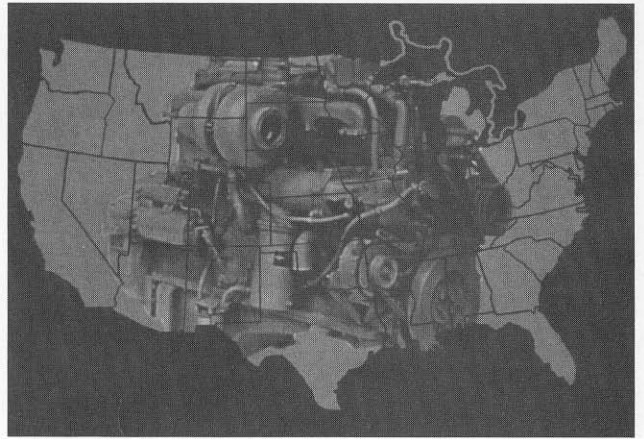


7. More than a product promotion... more than a marketing program... uprate is in fact a new concept, a concept that focuses on your customer's equipment utilization and operating costs.

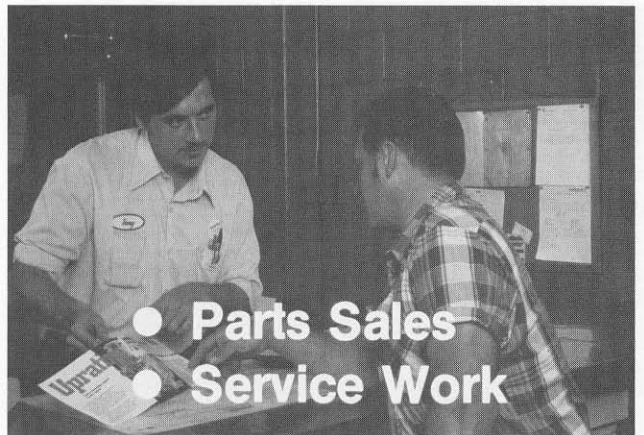


8. By uprating, your customers can improve the performance and fuel economy of their present Cummins engines with the added benefits of longer service life and increased resale value, taking advantage of advanced Big Cam II technology without the expense of buying new equipment at today's high interest rates.

9. Because it is a new concept, the potential market for uprates includes nearly all of the Small Cam and Big Cam I engines in your area, and you know what a large percentage of your engine population that is.



10. Focusing on items in which we have very little competition, uprate is an exciting opportunity for you to increase your parts sales, AND...draw more service work into your shop. You can sell uprate parts even though the engine is still in good operating condition.

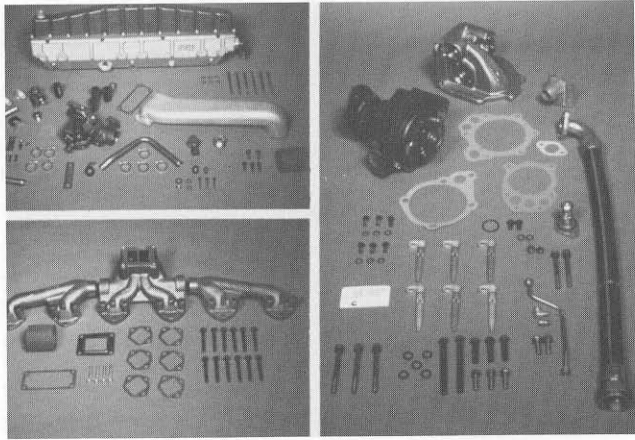


11. Uprates will not only increase your sales, but they will also result in greater customer satisfaction which is the basis for much of your repeat business.

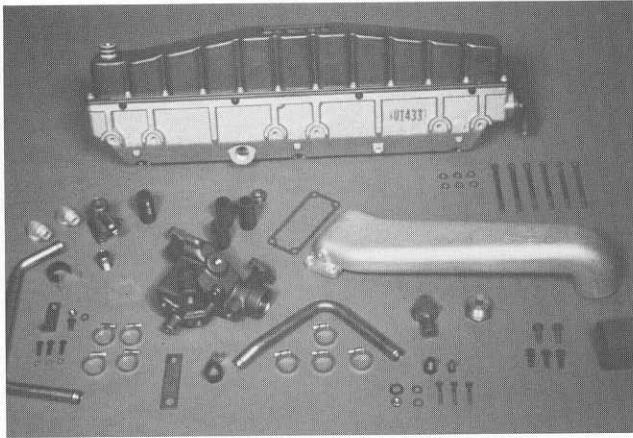


12. Small Cam and Big Cam I 290's, 350's, and 400's are the most popular engine models which can be uprated.

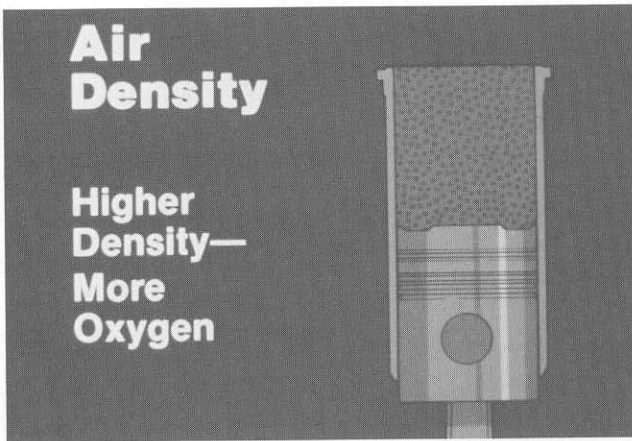




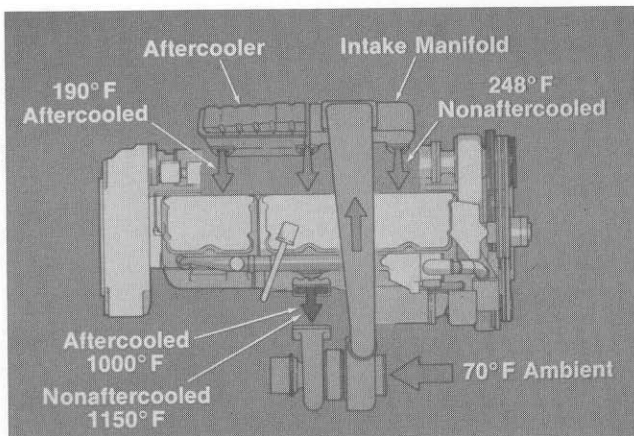
13. Currently, there are three uprate options: a crossbolt aftercooler, a "Tuned" exhaust manifold, and a "Demand Flow Cooling" (DFC) lubrication system. The three uprate kits may be purchased separately or in combination. Each system offers increased fuel economy plus its own particular advantages. Together, they bring the main features of Big Cam II technology to existing Small Cam and Big Cam I engines.



14. Adding an aftercooler reduces the temperature of the intake air by as much as fifty degrees or more.



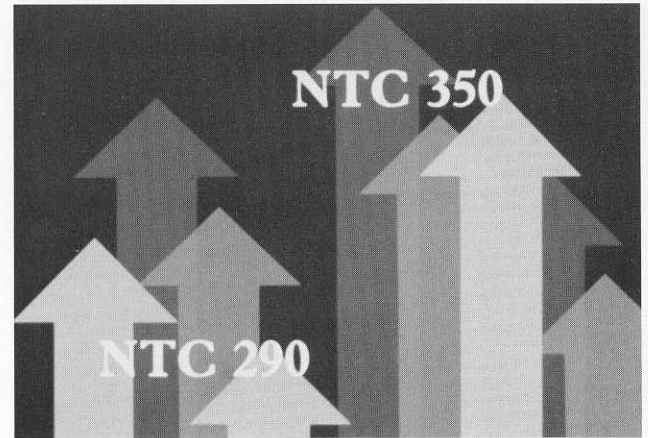
15. Because cooler air is denser, more oxygen can be forced into the cylinder which provides for efficient combustion, better fuel economy, and allows the customer to increase the horsepower output of his engine by making the necessary CPL and engine rating changes.



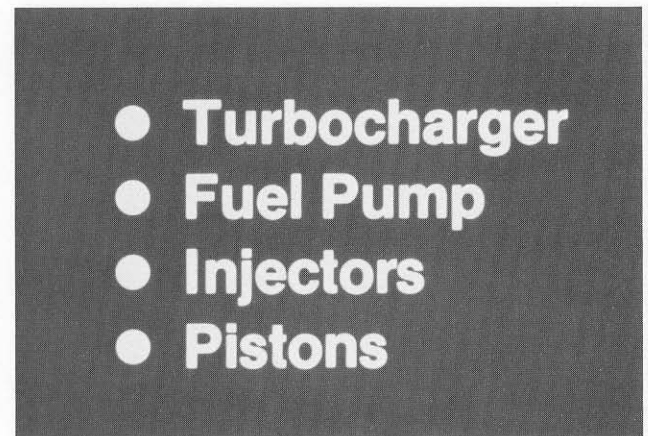
16. Cooler intake air also results in lower peak combustion and exhaust temperatures.

This is particularly important on turbocharged engines because compressing the intake air raises its temperature but circulating it through an aftercooler brings the temperature back down again.

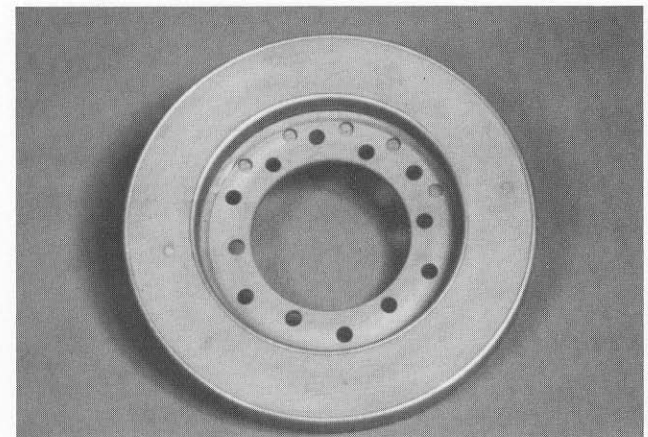
17. Adding an aftercooler also enables the customer to uprate his Small Cam engine from an NTC-290 to an NTC-350 by making the necessary CPL part changes.



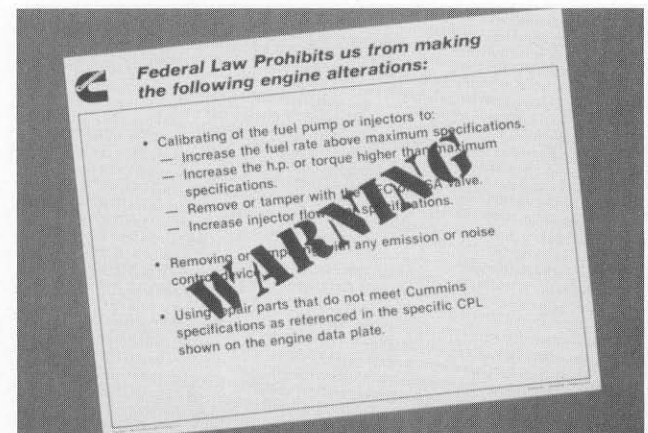
18. When uprating an engine in horsepower, the turbo-charger, fuel pump, injectors and pistons must be changed as required by the specific CPL code. Most of these parts are normally replaced or rebuilt as part of a routine overhaul.

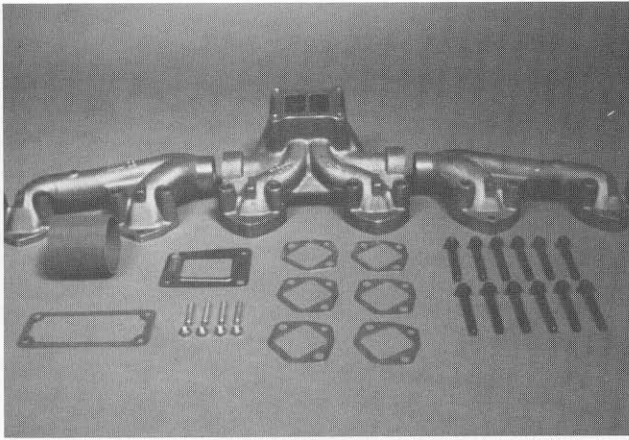


19. In some applications, a different vibration damper is required when uprating from an NTC-350 to an NTC-400.

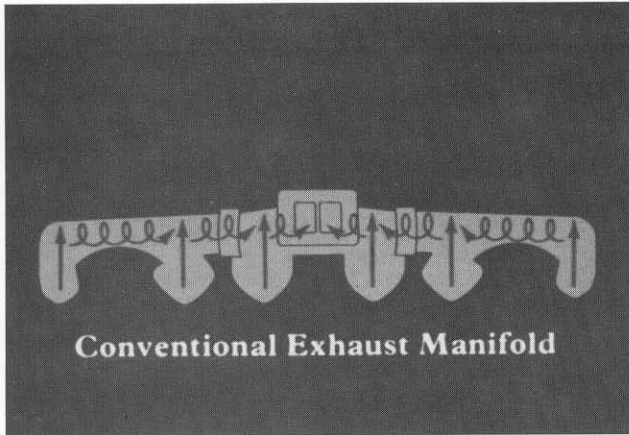


20. Failure to complete all of the CPL changes may result in a serious violation of federal and state regulations.

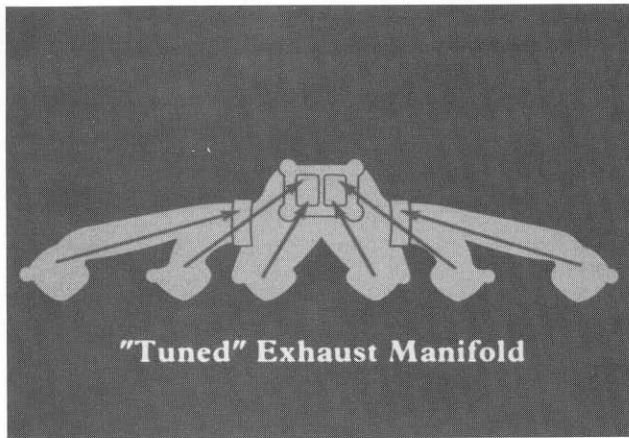




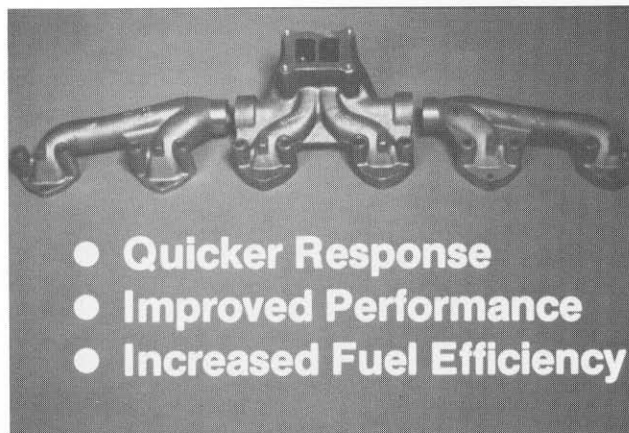
21. Perhaps the most popular uprate kit is the "Tuned" Exhaust Manifold. A big favorite with drivers and owner/operators, the "Tuned" manifold not only increases fuel economy, but also significantly improves performance and driveability.



22. In a conventional manifold, the shape of the passages and numerous right angle bends creates a swirling turbulence which actually impedes the flow of exhaust gases from the combustion chamber to the turbo-charger.



23. With the "Tuned" Exhaust Manifold, the exhaust gases race through the narrow confines of the small circular passages and around the smooth, aerodynamically contoured bends, unhampered as they speed directly to the turbocharger.

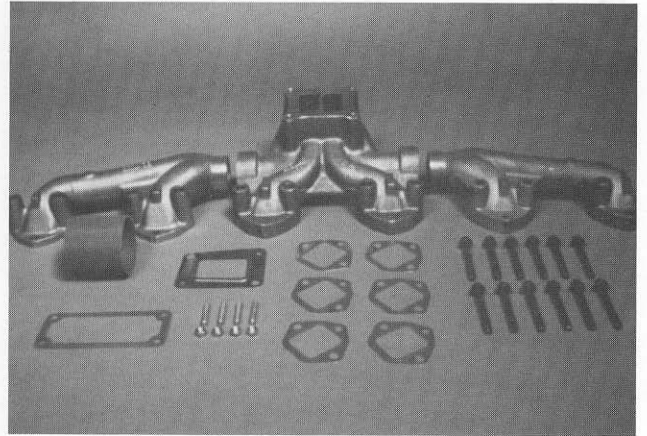


24. Because of less exhaust gas restrictions, more energy is delivered to the turbo. The result is quicker turbo-charger and engine response, improved performance, and increased fuel efficiency.

25. The fuel savings from the "Tuned" Exhaust manifold are significant, but for the driver, the biggest payoff is the improved performance and driveability, that "seat-of-the-pants" feeling you get from a quick, responsive engine, an engine that's not only powerful but eager.



26. The "Tuned" Exhaust Manifold Kit makes uprating quick and simple. All of the changes are external, and all of the necessary parts are included in the kit. In fact, the entire installation can usually be completed in little more than an hour.

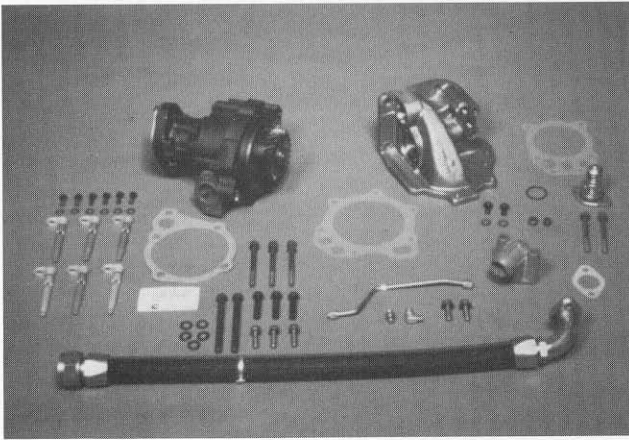


27. Almost any automotive NT Small Cam or Big Cam I engine can be uprated with one of the three basic manifold conversion kits. There is also a "Tuned" manifold for Industrial 855's.

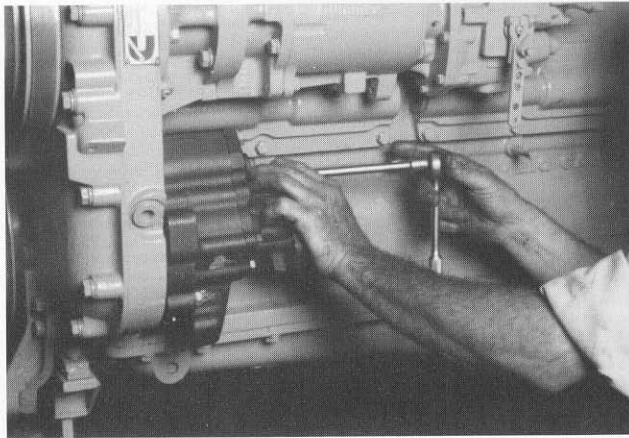


28. Although these manifolds are approved for retrofitting on NT Small Cam and Big Cam I engines, you are required to stamp the engine data plate with the field fix code "FF-66" in the space provided for specification certifications.



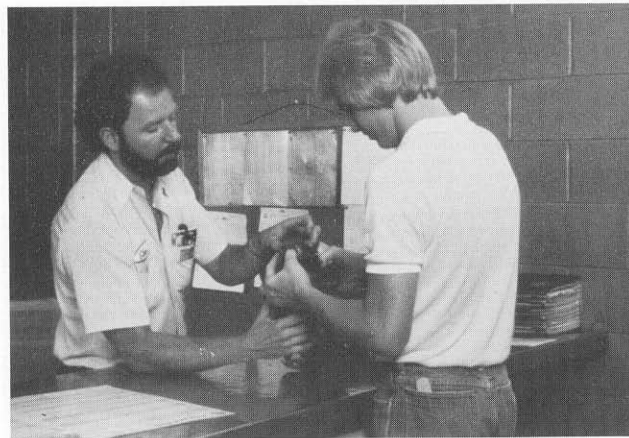


29. Somewhat less glamorous than the racey "Tuned" Exhaust manifold, the Demand Flow and Cooling Lube System Kit offers more advantages in terms of horsepower savings and fuel efficiency.



30. And... even though it does take a little longer to install than the manifold, it's a simple operation which can be done at anytime.

In fact, the lube pump, feedback line, piston cooling nozzles, and all of the necessary plumbing can be installed in just a few hours.

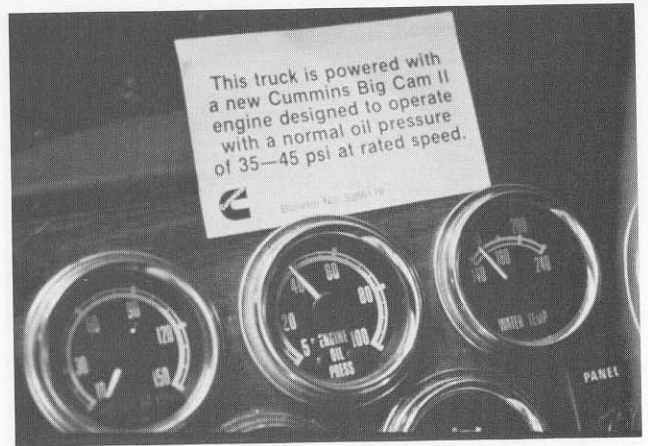


31. One of the reasons the DFC lube system kit is not as popular as the "Tuned" exhaust manifold is that most customers don't fully understand its advantages, and the salesperson must take the time to show the customer how it improves engine performance.

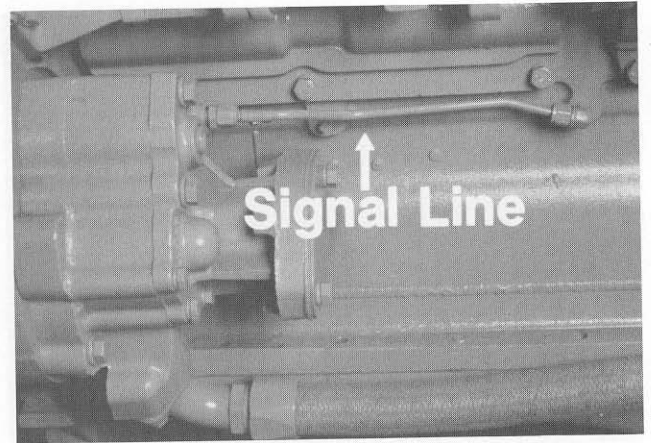


32. The secret of the DFC lube system is its efficiency. With a 33% reduction in both oil flow and pressure, the DFC lube system consumes less horsepower so the engine uses less fuel.

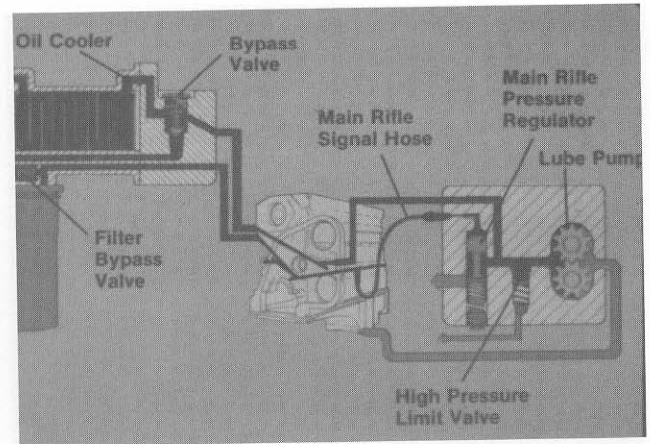
33. But! Because experienced drivers see low oil pressure as a sign of serious engine trouble, many customers are uncomfortable with the DFC concept of reduced oil pressure. Actually, the DFC lube system offers superior lubrication, much greater oil pressure control, and longer engine life.



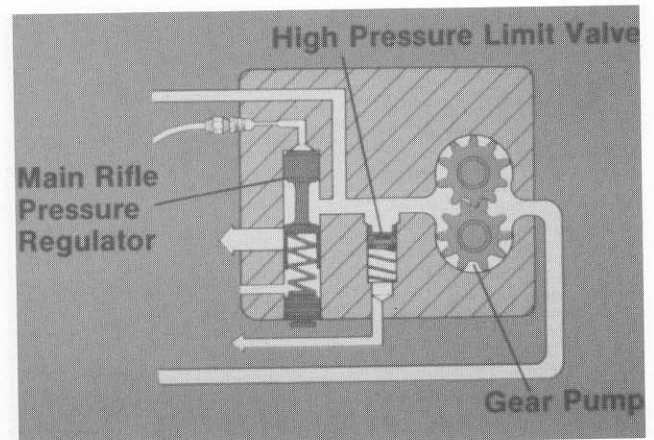
34. The feedback signal line between the pump and the main oil rifle enables the pump to adjust its oil flow to the engine as required to maintain the proper oil pressure, on DEMAND.

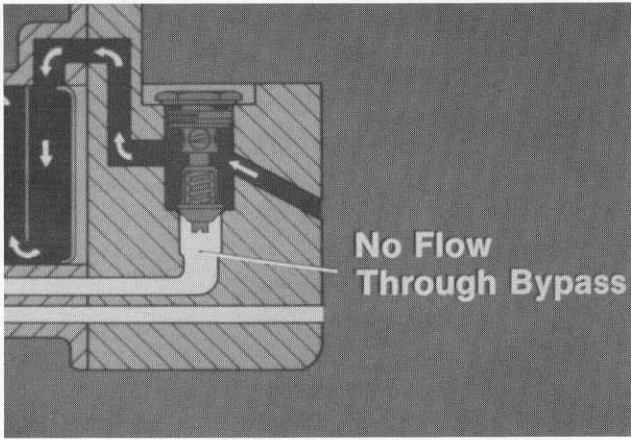


35. The "DFC" lube pump's maximum flow capacity has been reduced from 60 GPM to 40 GPM. The new regulating system maintains a nominal operating oil pressure of 40 psi instead of 60 psi. The system automatically adjusts for a wide variety of conditions such as varying oil viscosities and increasing filter restriction.

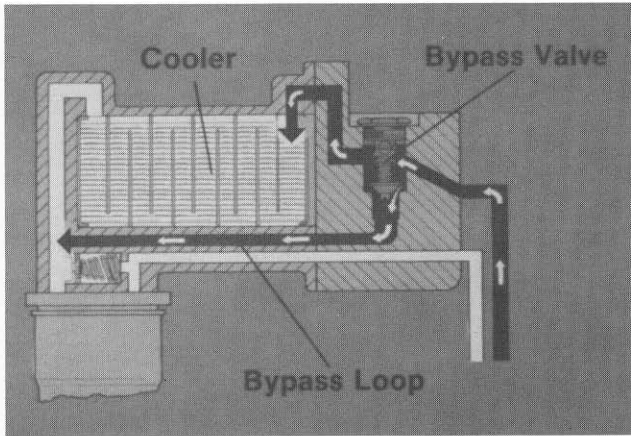


36. The main rifle regulator achieves a balance of oil pressure between the main oil rifle and the lube pump. When the main oil rifle pressure exceeds 40 psi, the regulator opens the port to the pan to drain off any excess oil to maintain the 40 psi. When the main oil rifle pressure levels at 40 psi or goes below, it closes the return port and increases the flow of oil to the engine so you're always assured of proper lubrication and pressure.

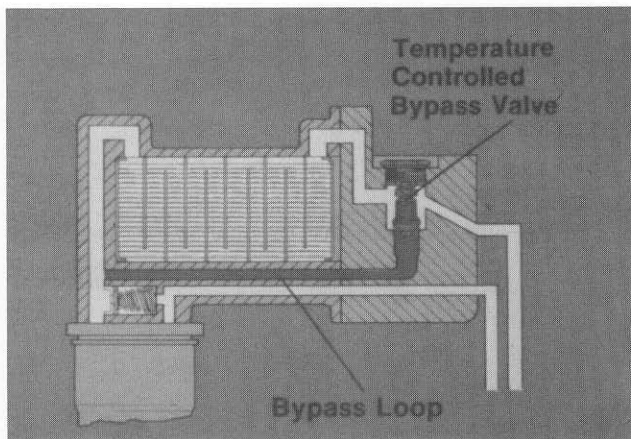




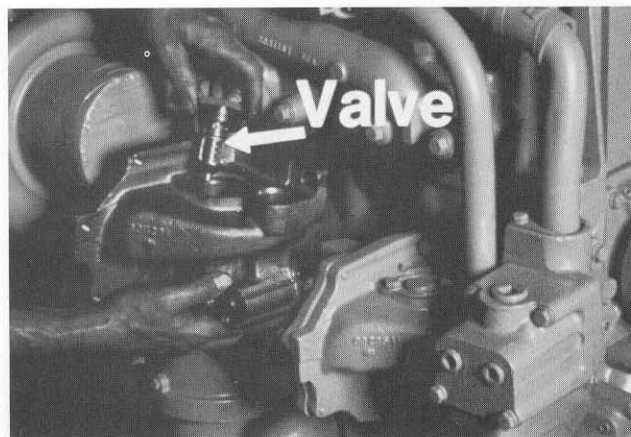
37. Another important feature of the DFC lube system is a thermostatically controlled bypass loop which prevents overcooling of the oil and results in additional horsepower savings.



38. When the tube oil temperature is below 230° F, half of the oil bypasses the cooler to provide faster warm-ups and prevent overcooling of the lube oil.

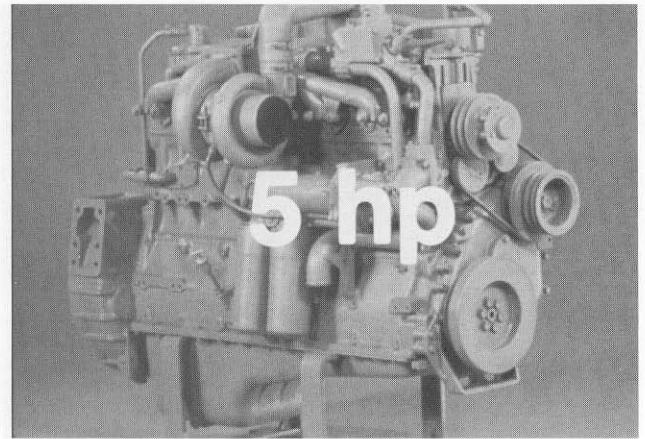


39. When the lube oil temperature rises above 230°, the bypass valve closes and all of the oil flows through the oil cooler.

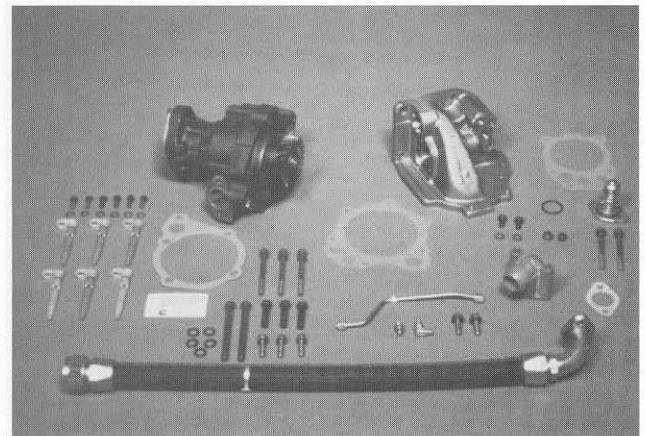


40. This bypass loop has several important benefits. First, warmer oil reduces friction between moving parts, and it requires less energy to circulate it through the engine. And secondly, when half of the oil bypasses the cooler, the pump doesn't have to work as hard. More power goes to the crank, and more work gets done on the same amount of fuel.

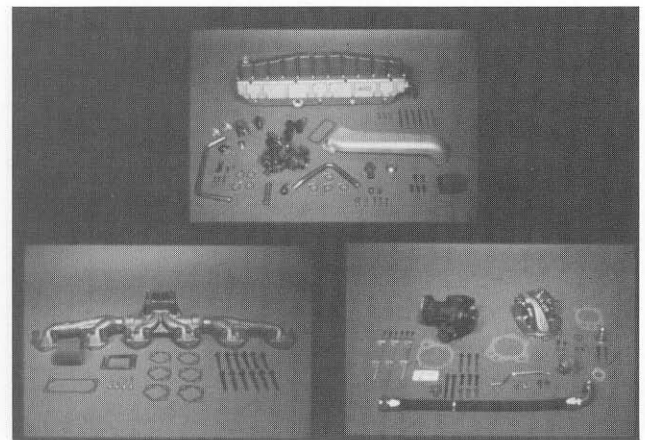
41. Overall, the DFC system can free up to five horsepower on an NT engine, not only improving fuel consumption, but increasing engine and part life as well.



42. Each DFC kit contains all of the parts necessary to retrofit a Small Cam FFC or Big Cam I engine; however, they will not work on Small Cam non-FFC engines.

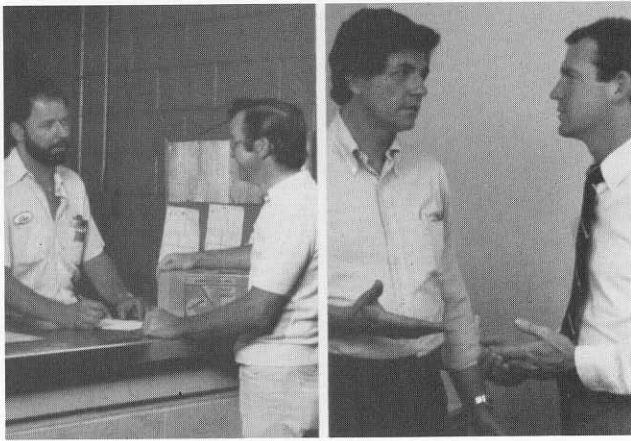


43. Aftercooler... "Tuned" exhaust manifold... and DFC lube system, all three kits can be purchased separately or in any combination. Each has its own advantages. All three kits together give your customer's engine the increased performance and fuel efficiency of Big Cam II technology, plus longer engine life and greater resale value.

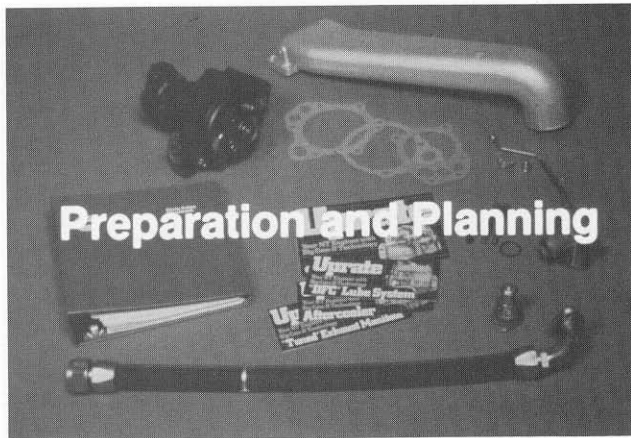


44. Whether your customers buy one kit or all three, Cummins uprate kits are the way to drive fuel costs down. Exactly how much fuel a customer will save depends upon a wide variety of factors, but with the continuing rise of fuel costs, the savings will be significant. The higher the price of fuel, the higher the dollar savings, and the more uprating pays off.

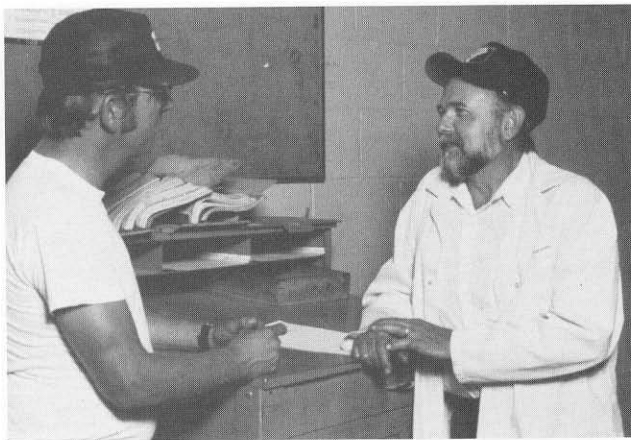




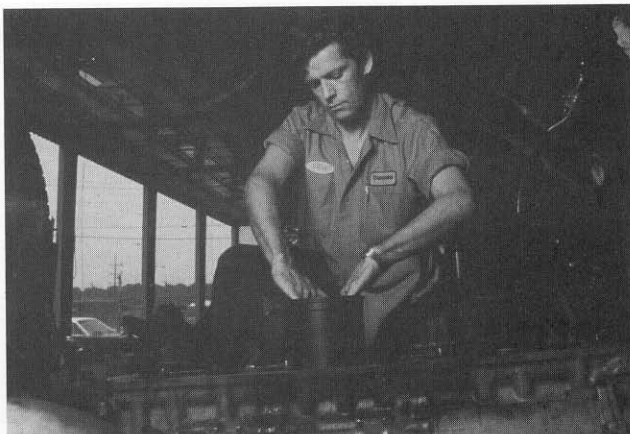
45. Whether you meet customers across a counter or in their own place of business, you've probably already begun thinking about how easy it'll be to sell an uprate.



46. But remember, the advantages of uprating may not be as obvious to your customers. A little preparation and planning coupled with a thorough understanding of uprates will go a long way towards closing those sales.



47. Every customer with an NT Small Cam or Big Cam I engine is a natural candidate for an uprate.

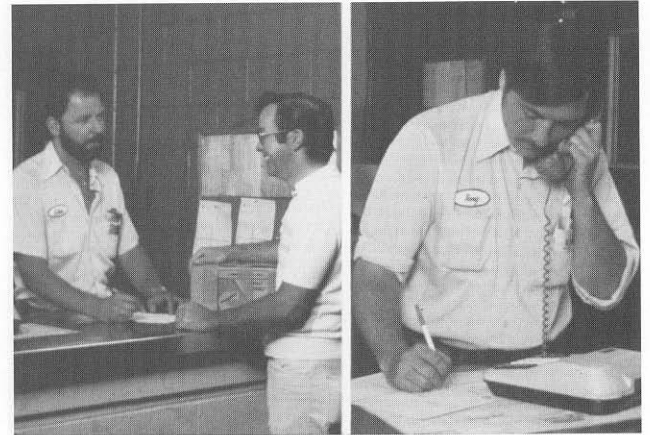


48. Obviously, an overhaul is a golden opportunity that shouldn't be missed.

49. But regardless of the scheduled service, every customer with a qualifying engine should be presented with the benefits of uprating. In the face of soaring fuel costs, they can hardly afford not to look at the fuel saving advantages of the Big Cam II uprate kits.



50. Likewise, parts counter customers and...telephone customers too, need to be told about uprate. Be on the lookout for **every** customer with a qualifying Small Cam or Big Cam I engine.

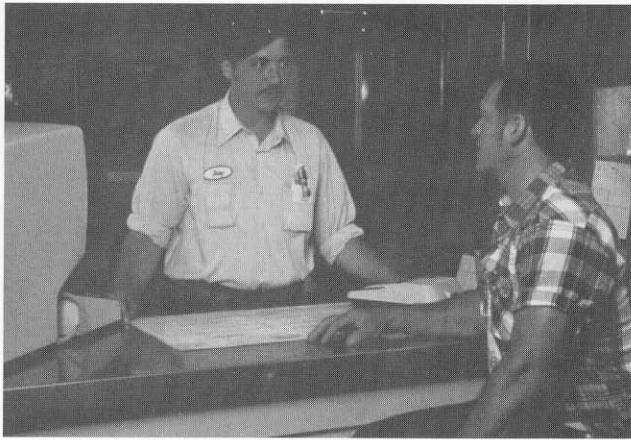


51. We're out to uprate every engine in the field, not just for the extra parts sales, but because we want to earn the added customer satisfaction that comes with an uprate.

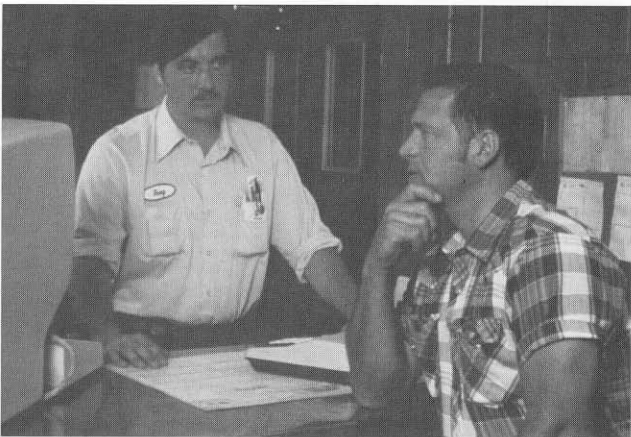


52. Here's a simple formula for driving home the fuel saving benefits of a Cummins uprate. Here's how it works.

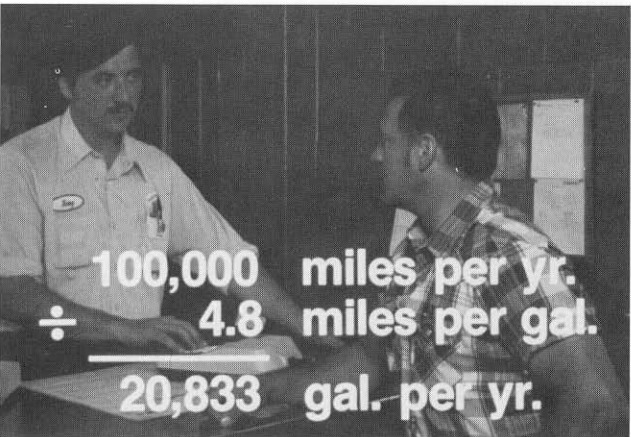
$$\begin{array}{r}
 \div \\
 = \\
 \times \\
 =
 \end{array}
 \begin{array}{l}
 \text{_____ miles per yr.} \\
 \text{_____ miles per gal.} \\
 \text{_____ gal. per yr.} \\
 \text{_____ cost per gal.} \\
 \text{_____ cost per yr.}
 \end{array}$$



53. **TONY:** Listen, Bob! Just how far did you drive that rig last year?



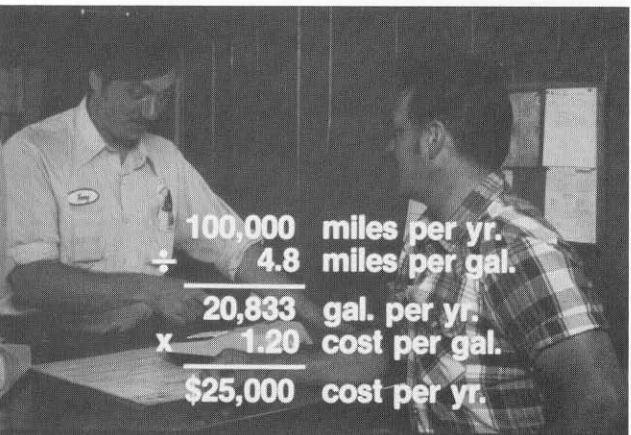
54. **BOB:** Well, we don't sit still for too long. I figure we covered a little better than a hundred thou.



55. **TONY:** Okay, let's see. What kind of mileage did you get?

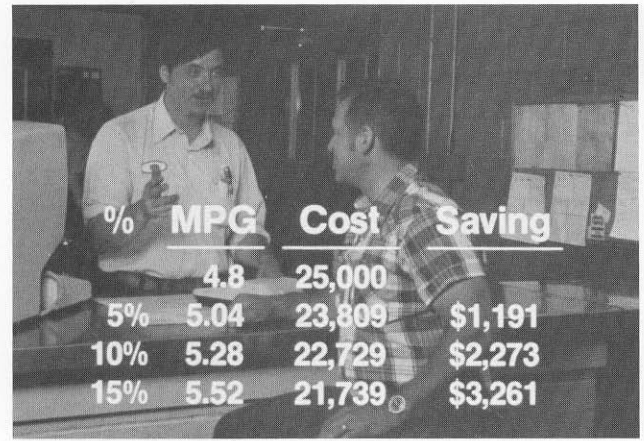
BOB: 4.8

TONY: That's about twenty thousand, eight hundred and thirty-three gallons.



56. **TONY:** Even at only a dollar twenty a gallon Why, that's twenty-five thousand dollars that you spend on fuel in a year!

57. **TONY:** If you could improve your mileage by just 5%, you would save \$1,191 a year on fuel. With a 10% improvement, you'd save \$2,273 and with a 15% improvement, you'd save \$3,261 a year. At that rate, your uprate would pay for itself in no time, and the rest of the savings would go into your pocket, year after year. The more miles you drive and the higher your fuel costs the more money you save.



%	MPG	Cost	Saving
	4.8	25,000	
5%	5.04	23,809	\$1,191
10%	5.28	22,729	\$2,273
15%	5.52	21,739	\$3,261

58. **TONY:** Plus, you'd be enjoying the improved performance and driveability right from the start. And, your engine would not only last longer, but it would also be worth more at trade-in time.

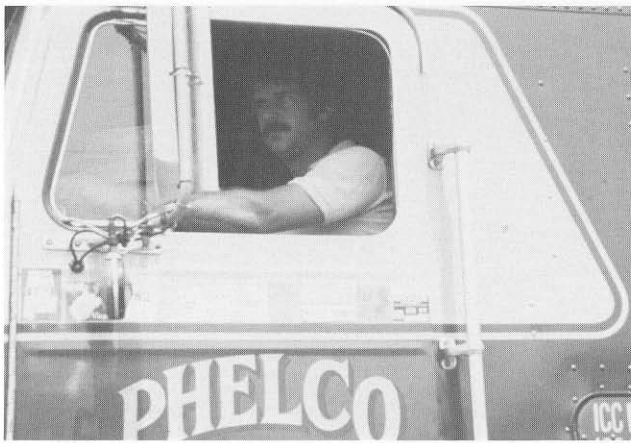


59. **NARRATOR:** With many fleets extending their equipment trade cycles, you'll find that your fleet customers are not only interested in fuel economy but also the longer engine life and higher resale value that comes with an uprate.

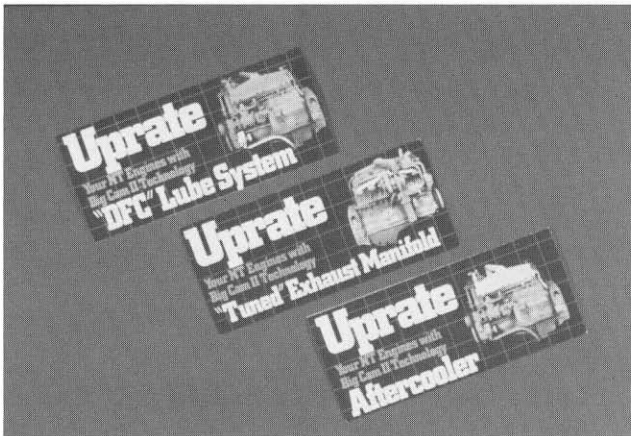


60. Growth and expansion or other changes in your customer's business often necessitate an increase in horsepower, and uprating is the way to go.





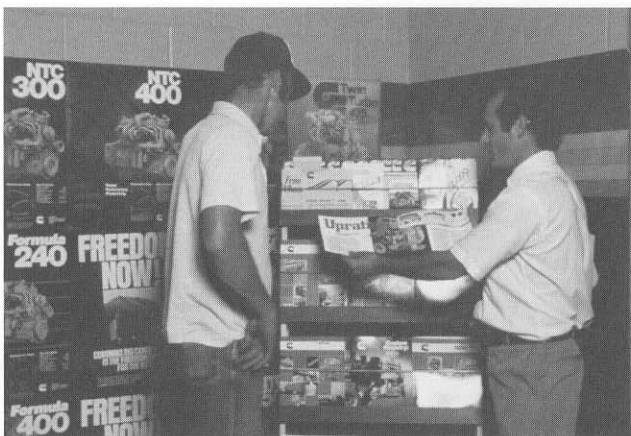
61. But with independent owner/operators, you should also emphasize the improved performance and driveability. Uprating the engine results in greater power and responsiveness, a change that the driver can actually feel.



62. Don't hesitate to support your claims with sales literature, third party references, and testimonials.

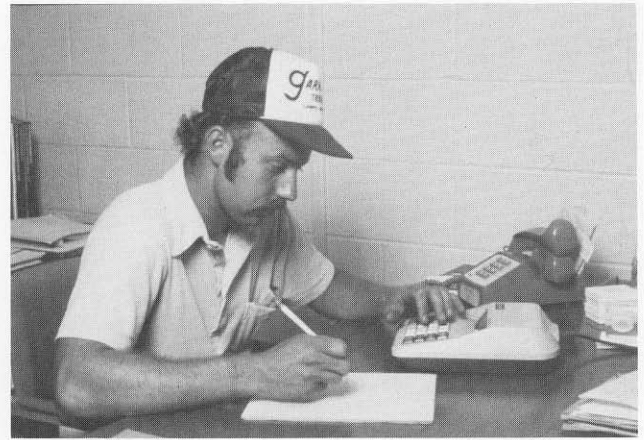


63. Nothing is more effective than the honest, candid opinion of your own satisfied uprate customers.

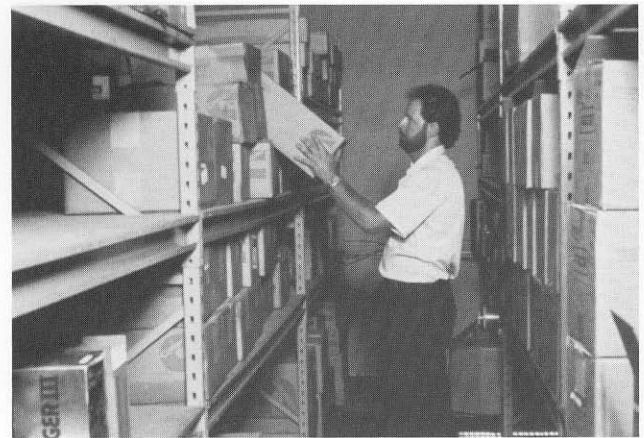


64. If the customer owns several trucks and is still not convinced, suggest that he conduct his own test by uprating just one of his trucks so he can see for himself.

65. Once he starts to compare the figures and realizes the potential cash savings, he'll be enthusiastic about upgrading his entire fleet. Salesman follow-up is key to keeping the customer aware of the savings available and checking his test results.



66. When it comes to actually supplying uprate parts, Cummins has taken care of that too. To make ordering easy, all of the uprate parts have been structured into off-the-shelf kits.

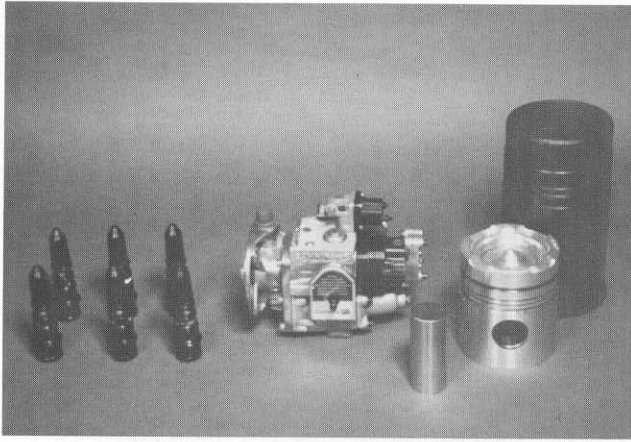


67. Currently there are only nineteen part numbers in the uprate program covering nearly all of the various chassis applications, and a maximum of only six part numbers is required to apply all three uprate options to any qualifying engine.

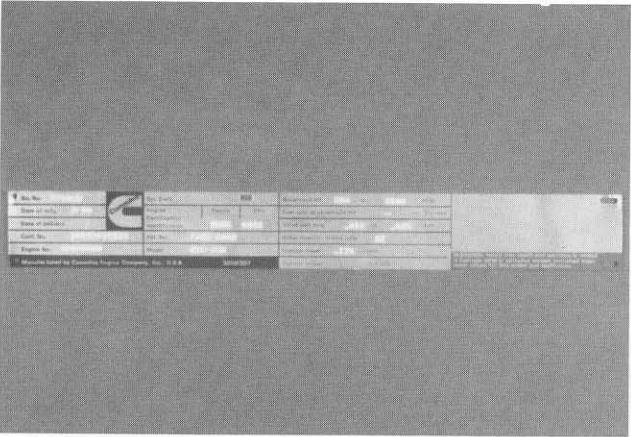
Uprate Parts by Application			
Engine	Aftercooler	Air Crossover	Cooler Mounting Kit
Ford - CL	3014337	3018686	3801219
Ford - L & LT	3014337	211012	3801218
Ford - LN	3014334	215755	3801220
Freightliner	3014337	3018686	3801244
GMC - Astro	3014337	3018686	3801217
GMC - Brigadier	3014337	3006296	3801221
GMC - General	3014337	3018686	3801217
IHC	3014337	3018686	3801218
Kenworth	3014337	3018686	3801218
Mack	3014337	3018686	3801218
Peterbilt	3014337	3018686	3801218
White	3014337	3018686	3801218

68. Handy reference tables for these numbers along with the details of the Trade-in program and other information can be found in your Parts Sales Handbook under PROGRAMS.

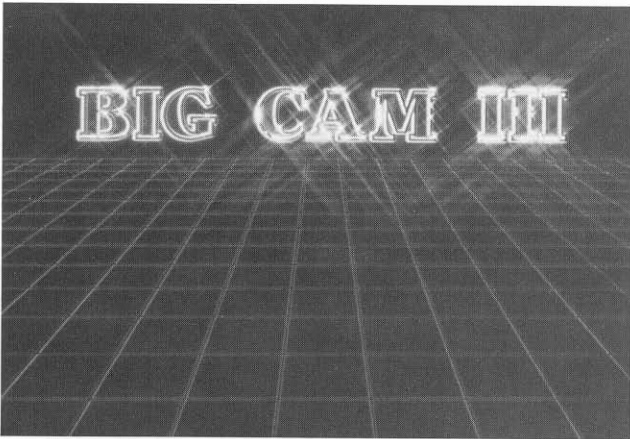




69. Remember, some uprates also require CPL part changes such as fuel pump codes, injectors, turbochargers and pistons.



70. All uprates which result in a change of the CPL code must be indicated by the addition of the proper CPL variance stamp.



71. In the near future, new uprate options will be introduced to retrofit existing engines with Big Cam III technology, not only in automotive applications but in industrial, agricultural and construction markets as well.

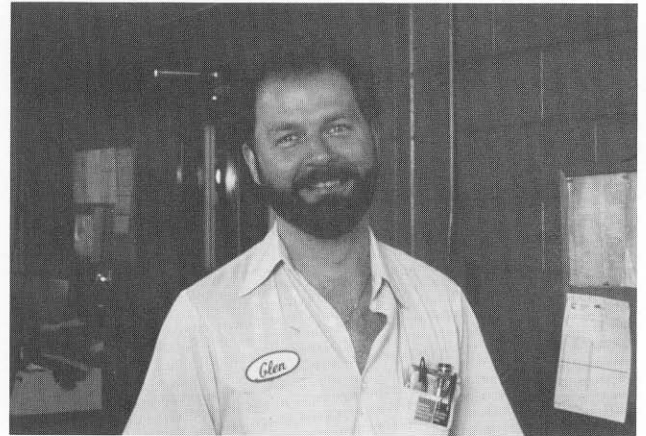


72. Uprate kits for other engine families will also be available soon.

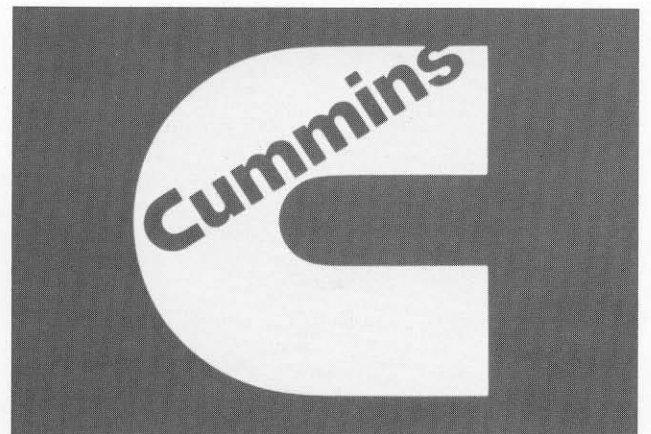
73. The uprate program is a continuing effort...part of Cummins long-term commitment to constantly improving our existing engines with the latest technology available,



74. ...providing you with the opportunity for additional parts sales...



75. ...and providing our customers with the best possible engines for their power needs.



Cummins Engine Company, Inc.
Columbus, Indiana 47201
Bulletin No. 3387197