

Part #1020

Name: **The ADJUSTER by Attitude** formerly Attitude Adjuster

US Patent #10/054,060



**Diesel
Performance**

Product Description:

(The ADJUSTER is shipped anodized BLACK; the red anodizing is used for display and demo only.)

Congratulations on acquiring **The ADJUSTER!** You'll now have the ability to gain FULL fuel control of your 12-valve Cummins or any P-7100 injection pump engine (4cyl, 6cyl, 8cyl) from **inside** the cab. Additionally, you'll realize benefits of more power, better fuel economy, lower EGT's, more boost, extended pump life and the ability to control smoke.

With ONE turn of the in-cab control knob, you have full and **precise** adjustability to tune from optimum economy to maximum power. All this is done while retaining the AFC housing (boost advance) which is crucial for drivability. With 16 precise, repeatable settings and infinite adjustability of **The ADJUSTER by Attitude**, you will be able to tune your engine without leaving your seat!

The ADJUSTER by Attitude will work on every Bosch P7100 injection pump with no modification required; it can improve the performance of trucks from stock to highly modified. **The ADJUSTER** is flow-bench and dyno proven.

The ADJUSTER housing comes pre-machined for the shut-off solenoid bracket on '94-'98 Dodge Rams.



Test bench flow results 12mm model 911 P7100 injection pump with APP's optional rack cap (#1007) and the standard #0 fuel profile
This flow chart shows 16 incremental Set Points on **The ADJUSTER by Attitude** knob, with corresponding fuel flow in cc's per 1000 strokes*

Setting	Fuel	Setting	Fuel	Setting	Fuel
1	45cc/1000	4	184cc/1000	7	358cc/1000
1.5	56cc/1000	4.5	215cc/1000	7.5	392cc/1000
2	80cc/1000	5	240cc/1000	8	426cc/1000
2.5	119cc/1000	5.5	281cc/1000	8.5	449cc/1000
3	123cc/1000	6	304cc/1000	End of Full Rack Travel	
3.5	152cc/1000	6.5	320cc/1000		

*Testing of the injection pump with **The ADJUSTER** was performed by a Bosch authorized repair center.

All parts required for installation are Included:

The ADJUSTER housing with a #0 fuel profile, New AFC housing arm machined for full fuel advance, Control Cable, In-cab Control Box, All necessary hardware

A word of caution before attempting any performance modification: It is the sole responsibility of the purchaser and installer of any APP part to employ the correct installation techniques required to ensure the proper operation of the part. APP offers the highest quality performance parts; however, APP holds no liability for any part failure due to improper installation or use. Some APP parts can be used for off-road and competition. It is the sole responsibility of the customer to verify that the use of their vehicle and items purchased comply with federal, state and local regulations. APP offers no certification regarding pollution-controlled devices or mandated emissions requirements. Performance products are legal in California only in certain strict circumstances. There is no instance where APP, it's officers, members, employees, agents, representatives, and/or volunteers are liable for any damages, personal or mechanical, whatsoever.

Install Instructions for The ADJUSTER:

(These instructions and an install video are on APP's FB page as well on APP's website.)

1. Remove Injection lines. (This is an easy installation, but if this first step intimidates you and your knees start to weaken, seek a qualified shop for installation.)
2. Remove AFC housing.
3. Remove existing arm from AFC housing and install **The ADJUSTER** AFC arm.
4. Remove cam plate on injection pump.

Technical Data/Install Sheet



5. Install **The ADJUSTER** on injection pump using the 4 supplied M6 Allen head bolts. Make sure the supplied O-ring is in the O-ring groove on the bottom of **The ADJUSTER** housing. (Note: **do not adjust The ADJUSTER until after step #5 is completed.** If using the shutoff solenoid, make sure the bracket is in slot on the side of **The ADJUSTER** housing.)

6. Drill 11/16" hole in the firewall next to the throttle cable. (See photo for recommended location of cable access hole.)

7. Route cable from **The ADJUSTER** through firewall into the cab, making sure the threaded end goes into the cab in the straightest route possible. Feed the cable from the engine compartment to the cab.

8. Apply a small amount of grease to the end of the cable and bolt that end of cable to **The ADJUSTER**. (No further maintenance is required due to the oil splash from the pump.)

9. Thread cable onto **The ADJUSTER** in-cab controller box.

10. Turn the in-cab controller counter clockwise until it stops: this is now your lowest setting of **The ADJUSTER**. (Turn the key on so the shutoff solenoid is in the run position before making adjustment.) Note: there is such a high degree of adjustability that turning the knob counterclockwise past #1 while driving can shut the truck off.

11. Next, unthread **The ADJUSTER** cable from the in-cab controller and move the dial to 1 and reinstall the cable. (Your Adjuster is now set at 1 on the pump and 1 on the controller.)

12. Mount the in-cab controller. (The mounting bracket and hardware are included.) It is recommended that you drill initial pilot holes for the mounting bracket screws.

13. For the first test drive with **The ADJUSTER**, start with the in-cab controller knob at its highest setting and go down from there. Every pump is different and will react differently to the defueled settings. To fine tune the #1 setting, operate the vehicle, find the lowest power setting that meets your needs, and set that point as your #1 setting. Refer to Step 11 to reset. If your engine has a higher idle or maintains a higher rpm between shifts, the AFC arm will need to be adjusted which is easy. Remove the AFC housing and loosen the same 10mm bolt that was initially removed when installing the new AFC arm. There is a slotted tab under the bolt. Rotate the slot until the AFC arm moves out of the housing as far as the tab will allow. Tighten the 10mm bolt and reinstall.

* You do NOT have to crank on the control knob to get great results. It's designed to be very responsive with only ONE rotation. You may risk binding the cable if you over rotate the knob.

** You can actually stop your engine by turning the in-cab control knob all the way counter-clockwise until it stops. This can be used as a great anti-theft deterrent.

Suggested supporting mods:

APP #1007 BILLET RACK CAP is drilled 4mm deeper than stock to allow a full 21mm rack travel; it is not required for lower operations, but is recommended to achieve greater performance and more horsepower for **The ADJUSTER**.

APP #1006 BILLET DELIVERY VALVE HOLDERS .093. They flow more fuel and advance timing. They're also a great way to dress up your injection pump.

Optional FUELING PROFILES: **The ADJUSTER** is shipped with a #0 profile, which is very efficient for most applications, but the following profiles are available for specific uses:

APP #1205 (#5) Recommended for 13mm pumps and all heavily modified trucks

APP #1206 (#6) Recommended for most street trucks with modifications

APP #1208 (#8) Great for towing

APP #1210 (#10) Recommended for 913 pumps and all pumps with notched-style plungers, & for stock or lightly modified trucks

CALIBRATING The ADJUSTER - Should there be a need, it's just an easy three-step process:

Step 1: With the cable connected to the back of the in-cab control box, SLOWLY turn the control knob counter-clockwise until it stops. (Anti-theft mode--the truck WILL NOT start in this position.)

Step 2: Turn the control knob 3 clicks clockwise. Disconnect the cable from the controller and then turn the control knob to Setting 1.

Final step: Reconnect the cable to the back of the in-cab control box ensuring the control knob stays on setting 1, and your calibration is complete. (This will be your lowest position to drive in, less than stock horsepower. Remember going counterclockwise from this position will shut the truck OFF; clockwise will increase fuel resulting in more HP and Torque)

ENJOY THE EASY ADJUSTABLE FUELING FROM THE CAB AND THANKS FOR CHOOSING ATTITUDE PERFORMANCE PRODUCTS!

