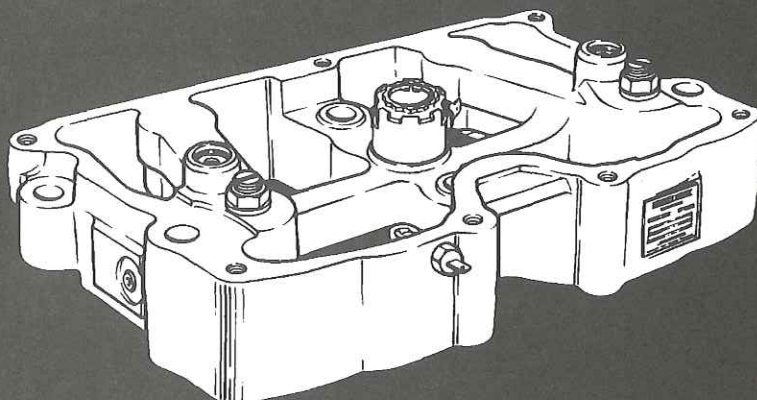




Parts Manual for MODEL 430

Jacobs[®]
**ENGINE
BRAKE**

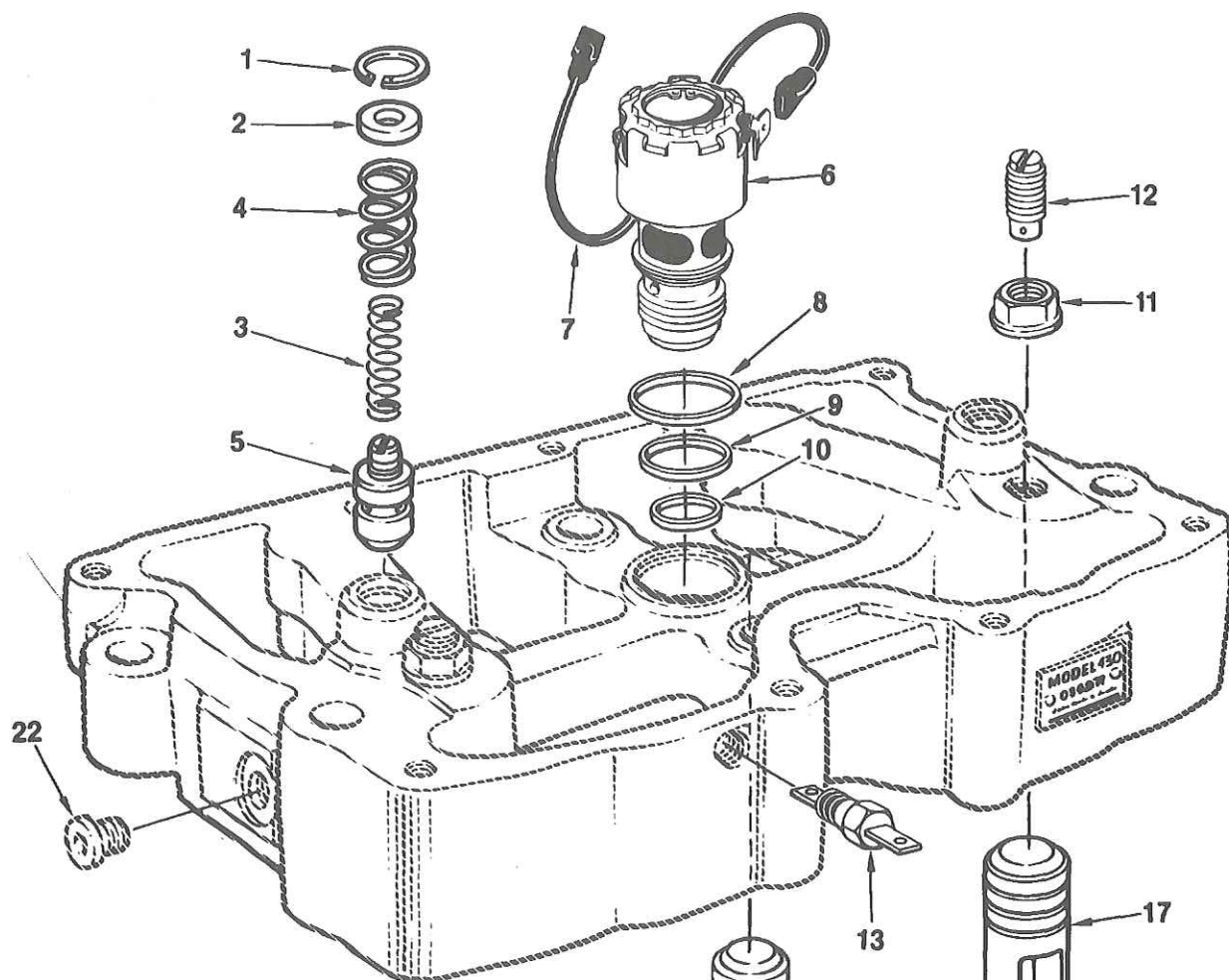


- THE MODEL 430 ENGINE BRAKE IS DESIGNED AND APPROVED FOR USE ON CUMMINS 88/89 NT ENGINES
- THE INFORMATION CONTAINED IN THIS MANUAL WAS CURRENT AT THE TIME OF PRINTING AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY.
- REFER TO JACOBS SERVICE LETTERS AND INSTRUCTIONAL LITERATURE FOR SPECIFIC APPLICATION INFORMATION.



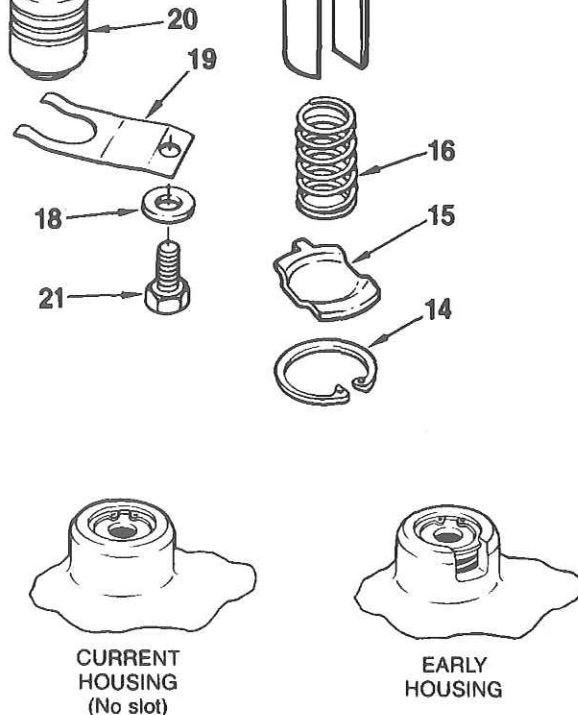
Saves a Truckload

The Jacobs Manufacturing Company
Vehicle Equipment Division
Bloomfield, CT 06002 U.S.A.



MODEL 430	016007 - (12 VDC)
HOUSING	016009 - (24 VDC)
ASSEMBLIES	014878 - STEP TIMING - (12 VDC)
(PACKAGED)	015895 - STEP TIMING - (24 VDC)

Illus. No.	Part No.	Part Name	Qty/ Assy
1	015561	Ring — Retaining	2
2	014928	Cover — Control Valve	2
3	007500	Spring — Inner	2
4	010843	Spring — Outer	2
5	011930	Control Valve	2
6	016440	Solenoid Valve (12 VDC)	1
6	016441	Solenoid Valve (24 VDC)	1
7	014619	Harness — Solenoid	1
8	001081	Seal Ring — Upper	1
9	001082	Seal Ring — Center	1
10	001083	Seal Ring — Lower	1
11	009353	Nut — Hex	2
*12	016012	Auto-Lash® Adjusting Screw	2
†12	015790	Auto-Lash® Adjusting Screw	2
13	002299	Terminal Assembly	1
14	001023	Ring — Retainer	2
15	014849	Retainer — Spring	2
16	014867	Spring — Slave Piston	2
17	014864	Piston — Slave	2
18	001030	Washer — Plain	2
19	007447	Spring — Flat	2
20	014868	Master Piston (.688 in.)	2
21	001492	Capcrew	2
**22	014506	Plug — Hex Socket w/O-Ring	1

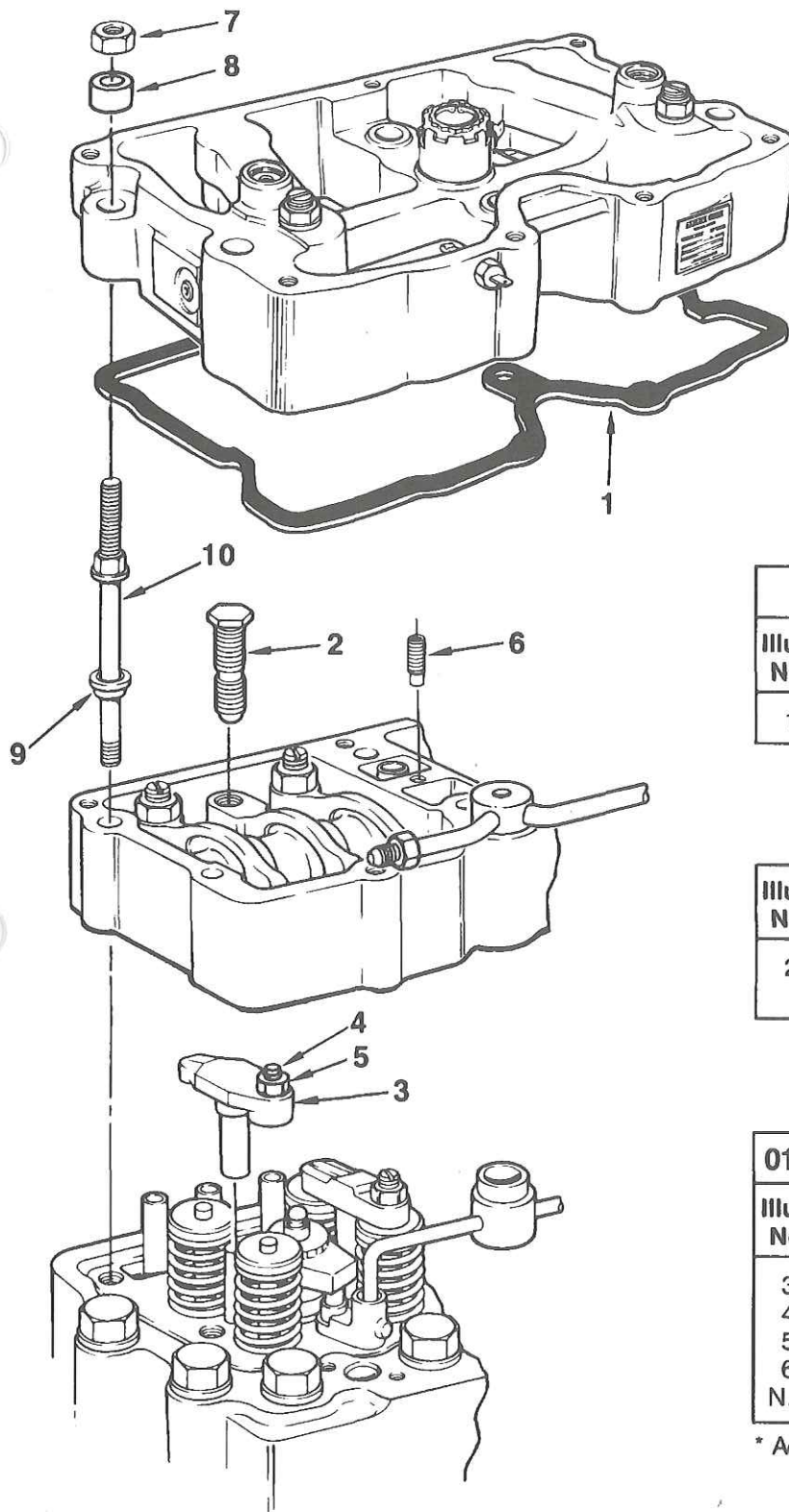


Earlier Model 430 housings contain a slot located at the control valve boss. Current housings have no slot. Use P.N. 014928 Control Valve Cover (with hole) for all service replacements. Discontinue use of the former P.N. 016031 cover which has no hole.

* P.N. 016012 and 015790 includes P.N. 009353 nut.

† For use with 014878 ST and 015895 ST Housing Assemblies

** For service replacement



01 — 014848 GASKET SET

Illus. No.	Part No.	Part Name	Qty
1	014848	Gasket	3

Illus. No.	Part No.	Part Name	Qty
2	015829	Screw - Injector Adj. (5/8" Hex Hd)	6

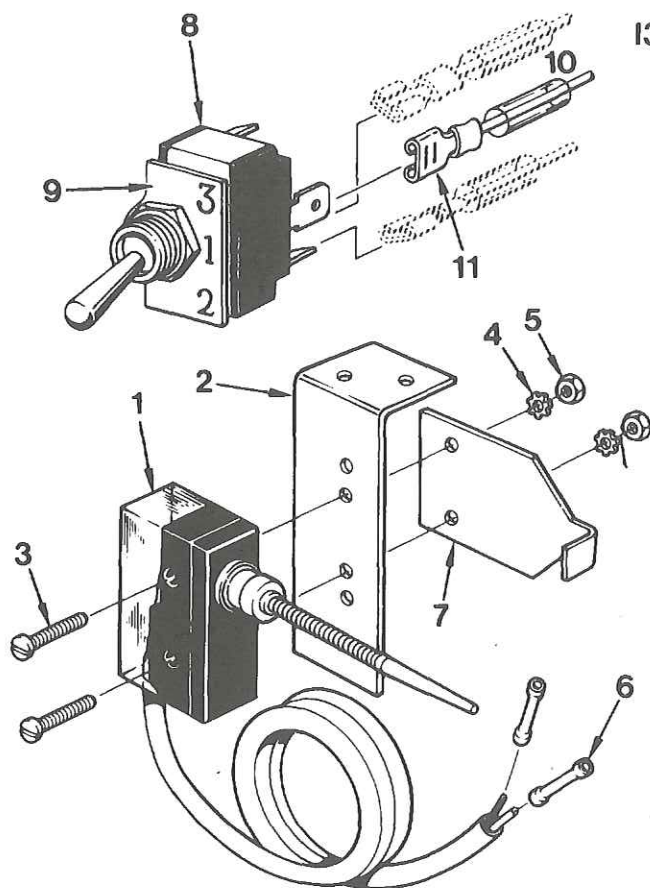
015622 HOUSING ATTACHING PARTS GROUP

Illus. No.	Part No.	Part Name	Qty/Grp
3	016767	Crosshead Assembly	6
4	016765	• Adjusting Screw *	6
5	016766	• Jamnut *	6
6	014927	Screw - Oil Supply	3
N.I.	016739	Decal - Slave Lash	1

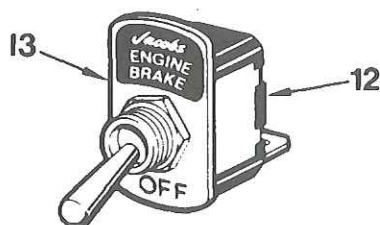
* Adjusting screw and nut are preassembled to crosshead.

STUD AND SPACER GROUPS

Illus. No.	Part No.	Part Name	Qty/Engine			
			015765	015623	016003	016619
7	015901	Hex Nut	18	18	18	18
8	001234	Spacer (Used with all lifting eyes)	6	3	3	3
9	002514	Bearing Washer	18	18	18	18
10	015633	Stud — 7" (17.8 cm)	6	9	9	6
10	015635	Stud — 8¼" (21.0 cm)	10	9	—	6
10	015637	Stud — 8¾" (22.2 cm)	2	—	—	6
10	016001	Stud	—	—	9	—



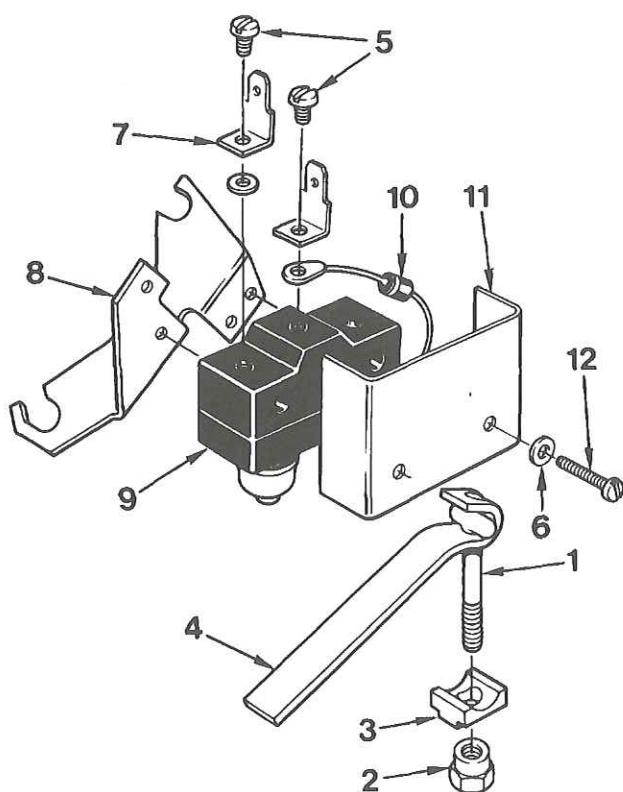
012261 CLUTCH SWITCH ASSEMBLY



003965 CAB CONTROL GROUP

Illus. No.	Part No.	Part Name	Qty/Grp
	012261	Switch Assembly — Clutch	1
1	012246	• Clutch Switch	1
2	012269	• Switch Mount Bracket	1
3	005377	• Pan Head Screw	2
4	005378	• Lockwasher	2
5	003306	• Hex Nut	2
6	013078	• Butt Splice	2
*7	012262	• Overtravel Bracket	1
NI	013674	• Instruction Sheet	1
	002970	Switch Assembly — Dash	1
8	002957	• Switch — Toggle	1
9	002959	• Plate — Dash	1
10	003707	Shrink Tube	4
11	003278	Receptacle	4
12	001304	Dash Switch	1
13	001305	Plate — Dash Switch	1
NI	003781	Harness — Wire	1
NI	003964	Diagram — Wiring	1
NI	006833	Tie — Cable	12
NI	015759	Wire	1
NI	002782	Receptacle	1

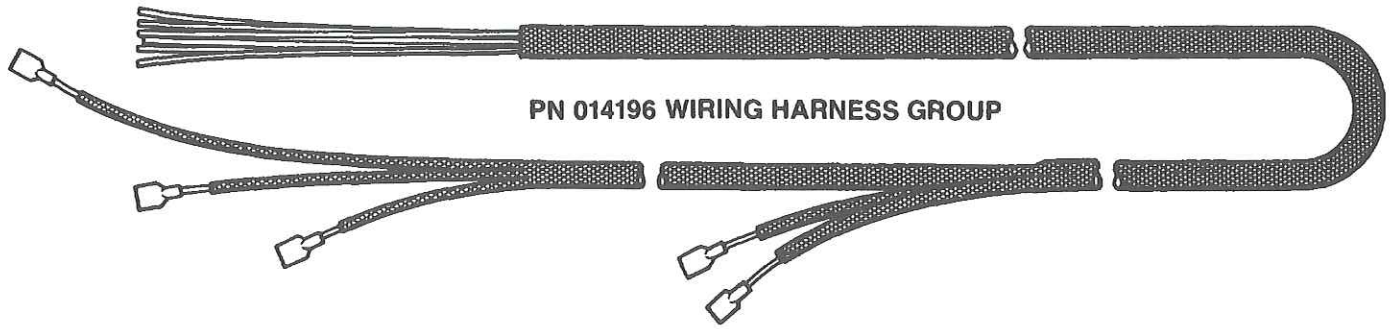
* Optional item not included in group.



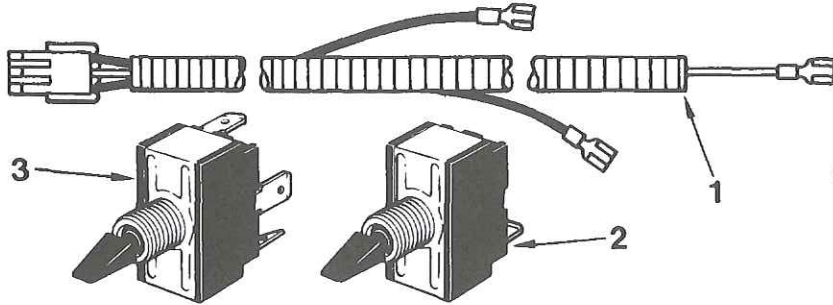
014035 ENGINE CONTROL GROUP

Illus. No.	Part No.	Part Name	Qty/Grp
1	014028	Tee Bolt	1
2	014030	Tee Bolt Nut	1
3	003768	Tee Bolt Guide	1
4	014027	Switch Actuating Lever	1
	007671	Switch Assy (Neg. Gnd.)	1
5	001558	• Screw — Binder Head	2
6	001559	• Washer — Lock	3
7	001512	• Tab — Quick Disconnect	2
8	006796	• Bracket — Switch Mount	1
9	001218	• Switch	1
10	001534	• Diode	1
11	001180	• Cover — Switch	1
12	001244	• Screw — Tapping	2
NI	003708	Tube — Shrink	3
NI	002014	Receptacle	3
NI	003881	Harness	3
NI	003778	Loom — Auto	1
NI	013997	Instruction Sheet	1

CONTROL SYSTEM OPTIONS

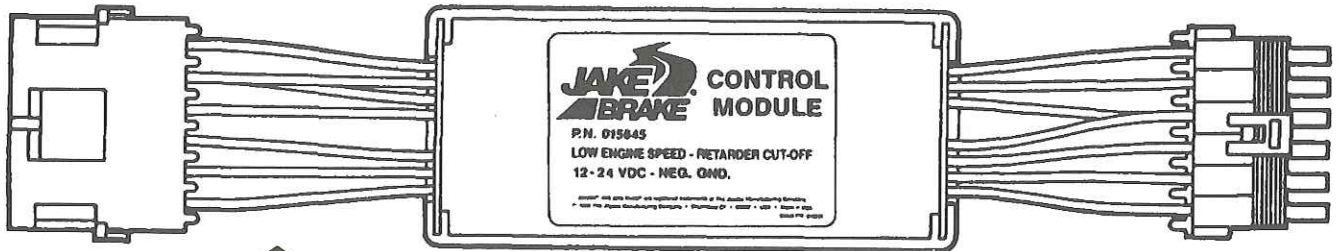


PN 014196 WIRING HARNESS GROUP



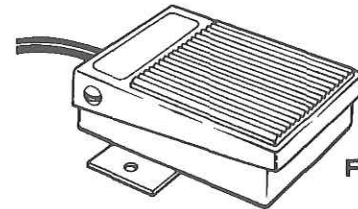
016327 NT PACE Control Group

Ill. No.	Part No.	Part Name	Qty.
1	015802	Harness Assembly	1
2	016264	On/Off Switch	1
3	016265	3 Position Sel. Sw.	1



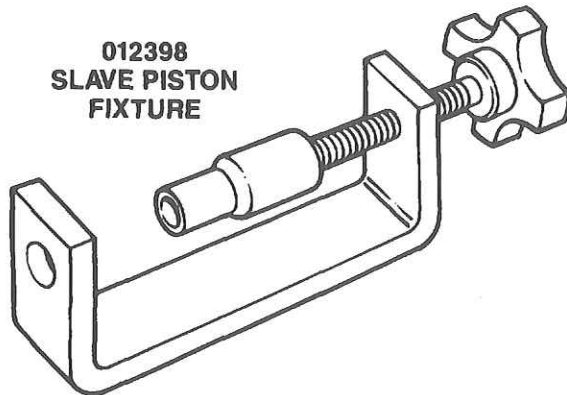
015644 LOW ENGINE SPEED RETARDER CUT-OFF GROUP

Part No.	Part Name	Qty.
015645	Control Module	1
016175	Wiring Harness	1
016177	Wiring Harness	1



PN 012260 FOOT SWITCH GROUP

SERVICE TOOLS AND PARTS

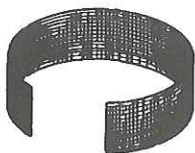


012398 SLAVE PISTON FIXTURE

FEELER GAUGES*		
Gauge P.N.	Thickness	88/89 NT Engine Applications
16560	.024 in.	Fixed Timing
15877	.030 in.	ECI**
16683	.046 in.	Step Timing
For Earlier Model 430ST Engine Brake		
16704	.040 in.	Step Timing

* See installation manual for correct slave piston adjustments.

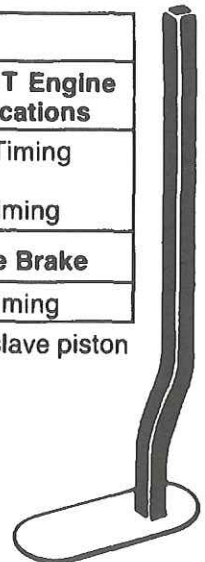
** Electronic controlled injection



PN 001282 SOLENOID SCREEN



PN 001283 SOLENOID SCREEN RETAINER



Jacobs®, Jake Brake®, and Auto-Lash® are registered trademarks of The Jacobs Manufacturing Company.