

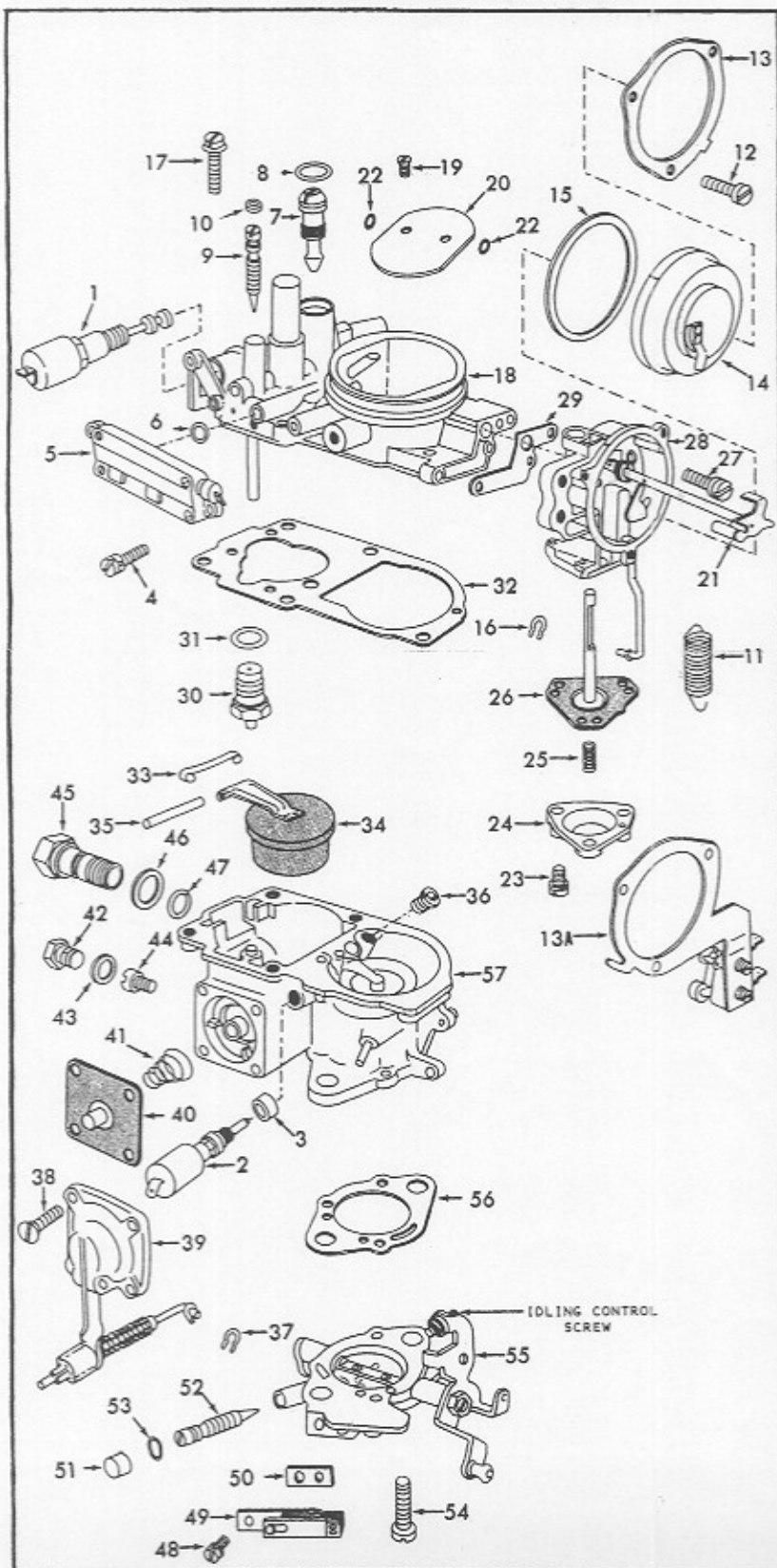
INSTRUCTION SHEET

SOLEX CARBURETOR—MODELS 34 PDSIT-2,-3

JULY 1972 TO 1974 - TYPE 2

GENERAL EXPLODED VIEW

THE GENERAL DESIGN AND PARTS SHOWN WILL VARY TO
INDIVIDUAL UNITS COVERED ON THIS INSTRUCTION SHEET.



REMOVING

REMOVE AIR CLEANER. DISCONNECT FUEL HOSE, CABLE FOR AUTOMATIC CHOKE, AND IDLE CUT-OFF VALVE, AND IF REBUILDING THE LEFT CARBURETOR, REMOVE DISTRIBUTOR. REMOVE CARBURETOR LINKAGE RETURN SPRING AND CONNECTING ROD. REMOVE TWO NUTS FROM STUDS ON CARBURETOR FLANGE AND TAKE OFF CARBURETOR.

DISASSEMBLY

USE EXPLODED VIEW AS A GUIDE. THE NUMERICAL SEQUENCE MAY GENERALLY BE FOLLOWED TO DISASSEMBLE UNIT FAR ENOUGH TO PERMIT CLEANING AND INSPECTION. CAUTION: BRASS TUBE TYPE JETS ARE NOT REMOVABLE. BEFORE REMOVING CHOKE PLATE SCREWS (19) FILE OFF PEENED END FOR EASY REMOVAL.

NOMENCLATURE

REF. NO.	REF. NO.
1. VALVE - BYPASS AIR CUT OFF	29. COVER - WITH LEVER AND CONNECTION ROD
2. VALVE - IDLE CUT-OFF	40. DIAPHRAGM - PUMP
3. SEALING WASHER - IDLE CUT-OFF VALVE	41. SPRING - DIAPHRAGM
4. SCREW & LOCKWASHER (2) - VALVE	42. PLUG - MAIN JET
5. VALVE - THERMO CUT-OFF	43. GASKET - PLUG
6. O-RING - THERMO CUT-OFF VALVE	44. JET - MAIN
7. SCREW - BYPASS AIR	45. PLUG - FUEL BOWL (SOME LATE MODELS)
8. O-RING - BYPASS AIR SCREW	46. GASKET - PLUG
9. SCREW - CONTROL	47. O-RING - PLUG
10. O-RING - CONTROL SCREW	48. SCREW & LOCKWASHER - HOT IDLE VALVE
11. SPRING - RETURN	49. VALVE - HOT IDLE
12. SCREW (3) - RETAINING RING	50. GASKET - HOT IDLE VALVE
13. RETAINING RING - COVER	51. SEAL PLUG - VOLUME CONTROL SCREW
13A. RETAINING RING & MICRO SWITCH - (RIGHT SIDE CARB A/T.)	52. SCREW - VOLUME CONTROL
14. COVER - WITH SPRING & HEATER ELEMENT	53. O-RING VOLUME CONTROL SCREW
15. GASKET - COVER	54. SCREW (2) - THROTTLE HOUSING
16. CLIP - CONNECTOR ROD	55. THROTTLE HOUSING ASSY.
17. SCREW & LOCKWASHER (5) - UPPER BODY	56. GASKET - MAIN BODY TO THROTTLE HOUSING
18. BODY ASSY. - UPPER	57. MAIN BODY ASSY.
19. SCREW (2) - CHOKE PLATE	
20. PLATE - CHOKE	
21. SHAFT - CHOKE PLATE	
22. SPACEWASHER (2) - CHOKE PLATE	
23. SCREW & LOCKWASHER (3) - COVER	
24. COVER - VACUUM DIAPHRAGM	
25. SPRING - VACUUM DIAPHRAGM	
26. VACUUM DIAPHRAGM - CHOKE	
27. SCREW & LOCKWASHER (2) - CHOKE HOUSING	
28. HOUSING ASSY. - CHOKE	

CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. USE A CARBURETOR CLEANING SOLVENT. MAKE CERTAIN THE THROTTLE BODY IS FREE OF ALL HARD CARBON DEPOSITS. WASH OFF IN SUITABLE SOLVENT. BLOW OUT ALL PASSAGES IN CASTINGS WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF OBSCURE AREAS. CAUTION: DO NOT SOAK SOLENOIDS, SWITCHES, FLOAT, OR RUBBER PARTS IN SOLVENTS.

REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY, GIVING SPECIAL ATTENTION TO THE FOLLOWING SPECIAL INSTRUCTIONS.

SPECIAL INSTRUCTIONS

MAKE SURE ALL JET ORIFICES ARE CLEAN AND OPEN. CLEAN WITH COMPRESSED AIR. DO NOT USE WIRES TO CHECK FOR CLOGGED ORIFICES.

WHEN INSTALLING THE PUMP DIAPHRAGM AND SPRING (41) MAKE SURE THE LARGER END OF SPRING IS PROPERLY SEATED IN THE CARBURETOR BODY CAVITY. BE SURE TO INSTALL THE DIAPHRAGM (40) WITH PLUNGER TOWARD PUMP COVER (33).

CHECK FOR A WORN SPOT (DEPRESSION) ON THE FLOAT LEVER WHERE IT MAKES CONTACT WITH THE FUEL INLET NEEDLE VALVE. REPLACE FLOAT ASSEMBLY IF NECESSARY. FLOAT ASSEMBLY MAY BE PURCHASED AT LOCAL VW DEALER, P/N 311-129-391A ROUND SHAPED FLOAT (34).

CHECK THE THERMOSTATIC SPRING IN HOUSING (ITEM #14) FOR DAMAGE IF IT IS DISTORTED OR "KINKED", REPLACE THE ASSEMBLY. ALSO, MAKE SURE THE ELECTRICAL HEATING ELEMENT IS NOT BROKEN. THIS CAN BE CHECKED WITH AN OHMMETER OR CONNECTED TO A CORRECT VOLTAGE BATTERY FOR A FEW MINUTES TO SEE IF IT WARMS UP. (BE SURE TO GROUND THE INSIDE METAL PART OF THE HOUSING IN ORDER TO COMPLETE THE CIRCUIT.) WHEN INSTALLING ASSEMBLY WITH SPRING AND HEATER ELEMENT, CAREFULLY ROTATE ASSEMBLY COUNTERCLOCKWISE, BEING SURE THE HOOK ON COIL END ENGAGES WITH THE LEVER ON CHOKE SHAFT. CONTINUE ROTATING APPROXIMATELY 1/8 TURN MORE UNTIL INDEX MARKS ALIGN. THEN TIGHTEN SCREWS SECURELY.

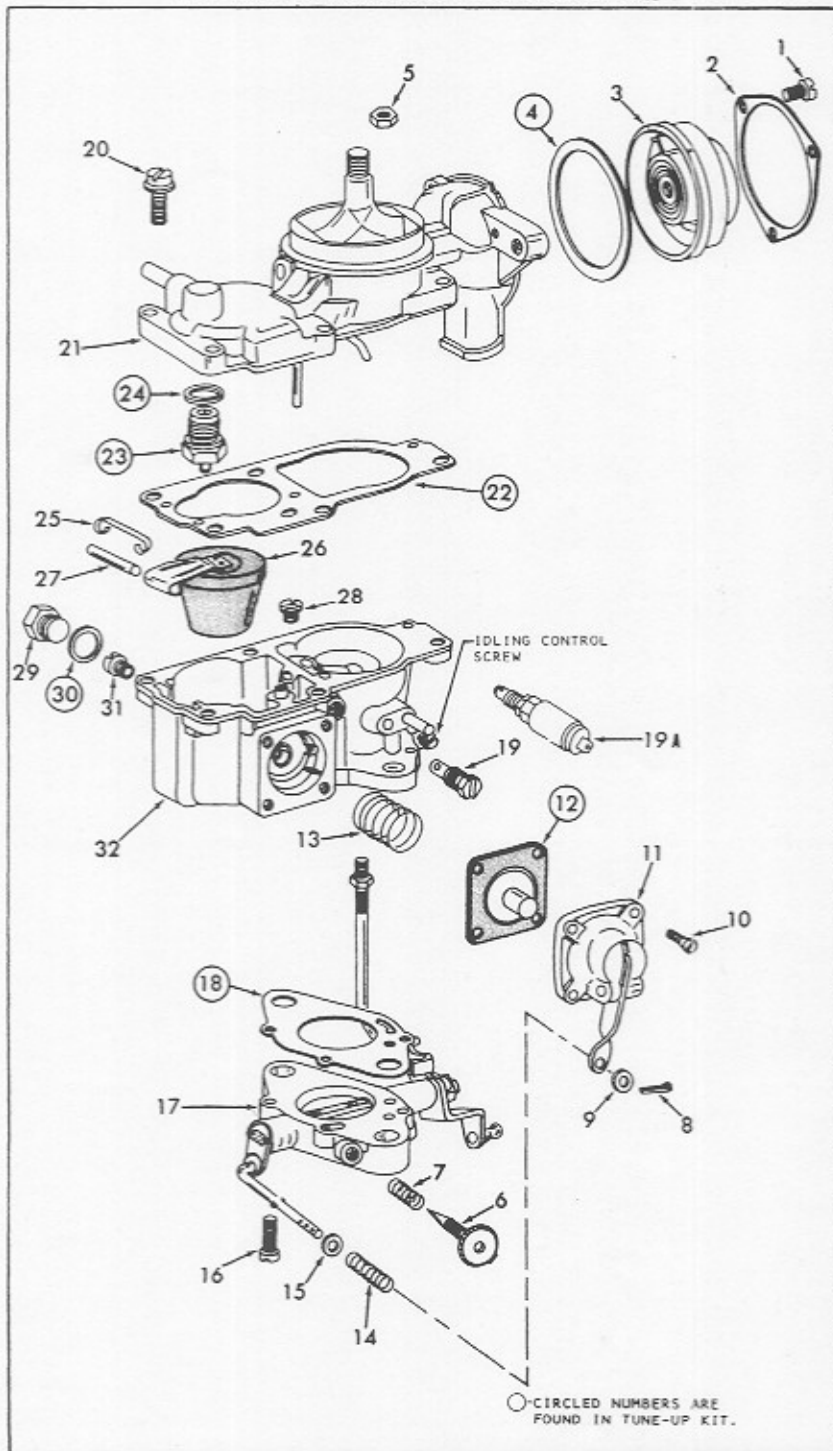
INSTRUCTION SHEET

SOLEX 32PDSIT-2,-3 CARBURETORS

1964 TO 1967—TYPE 3

GENERAL EXPLODED VIEW

THE GENERAL DESIGN AND PARTS SHOWN WILL VARY TO INDIVIDUAL UNITS COVERED ON THIS INSTRUCTION SHEET.



REMOVING

REMOVE AIR CLEANER. DISCONNECT FUEL HOSE, CABLE FOR AUTOMATIC CHOKE, AND IDLE CUT-OFF VALVE, AND IF REBUILDING LEFT CARBURETOR, REMOVE VACUUM HOSE FOR DISTRIBUTOR. REMOVE CARBURETOR LINKAGE RETURN SPRING AND CONNECTING ROD. REMOVE TWO NUTS FROM STUDS ON CARBURETOR FLANGE AND TAKE OFF CARBURETOR.

DISASSEMBLY

USE EXPLODED VIEW AS A GUIDE. THE NUMERICAL SEQUENCE MAY GENERALLY BE FOLLOWED TO DISASSEMBLE UNIT FAR ENOUGH TO PERMIT CLEANING AND INSPECTION. CAUTION: BRASS TUBE-TYPE JETS ARE NOT REMOVABLE. NOTE POSITION OF LOCKNUT (5) BEFORE REMOVING.

NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW (3) RETAINING RING	17. THROTTLE HOUSING ASSY.
2. RETAINING RING - COVER	18. GASKET - MAIN BODY TO THROTTLE HOUSING
3. COVER - WITH SPRING AND HEATER ELEMENT	19. JET - PILOT (EARLY MODELS)
4. GASKET - COVER	19A. VALVE - IDLE CUT-OFF (LATE MODELS)
5. LOCKNUT - THROTTLE CONNECTOR ROD	20. SCREW & WASHER (5) - UPPER BODY
6. SCREW - VOLUME CONTROL	21. UPPER BODY ASSY.
7. SPRING - VOLUME CONTROL SCREW	22. GASKET - UPPER BODY
8. COTTER PIN - PUMP ROD	23. NEEDLE & SEAT ASSY.
9. WASHER - PUMP ROD	24. GASKET - NEEDLE SEAT
10. SCREW (4) - PUMP COVER COVER - WITH LEVER & PIN	25. SEAT SPRING - FLOAT PIN
11. DIAPHRAGM - PUMP	26. FLOAT
12. SPRING - PUMP DIAPHRAGM	27. PIN - FLOAT LEVER
13. SPRING - PUMP ROD	28. JET - AIR CORRECTION
14. WASHER - PUMP ROD	29. PLUG - MAIN JET
15. SCREW (2) - THROTTLE HOUSING	30. GASKET - PLUG
	31. JET - MAIN
	32. MAIN BODY ASSY.

CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. USE A CARBURETOR CLEANING SOLVENT. MAKE CERTAIN THE THROTTLE BODY IS FREE OF ALL HARD CARBON DEPOSITS. WASH OFF IN SUITABLE SOLVENT. BLOW OUT ALL PASSAGES IN CASTINGS WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF OBSCURE AREAS. CAUTION: DO NOT SOAK SOLENOIDS, RUBBER OR PLASTIC PARTS IN SOLVENTS.

REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS.

SPECIAL INSTRUCTIONS

MAKE SURE ALL JET ORIFICES ARE CLEAN AND OPEN. CLEAN WITH COMPRESSED AIR. DO NOT USE WIRES TO CHECK FOR CLOGGED ORIFICES.

WHEN INSTALLING PUMP DIAPHRAGM SPRING (13) MAKE SURE SPRING IS PROPERLY SEATED IN METAL CAP ATTACHED TO DIAPHRAGM (12) AND THE PLUNGER IS TOWARDS THE PUMP COVER (11).

PUMP STROKE ADJUSTMENT. PLACE COTTER PIN IN CENTER HOLE OF PUMP ROD (ADJUST AS NEEDED) INSIDE HOLE RICHER, OUTER HOLE LEANER.

CHECK FOR A WORN SPOT (DEPRESSION) ON THE FLOAT LEVER WHERE IT MAKES CONTACT WITH THE FUEL INLET NEEDLE VALVE. REPLACE FLOAT ASSEMBLY, IF NECESSARY. FLOAT ASSEMBLY MAY BE PURCHASED AT LOCAL VW DEALER P/N 311-129-591A ROUND SHAPED FLOAT (26).

CHECK THE THERMOSTATIC SPRING IN HOUSING (ITEM #5) FOR DAMAGE. IF IT IS DISTORTED OR "KINKED" REPLACE THE ASSEMBLY. ALSO, MAKE SURE THE ELECTRICAL HEATING ELEMENT IS NOT BROKEN. THIS CAN BE CHECKED WITH AN OHMMETER OR CONNECTED TO A CORRECT VOLTAGE BATTERY FOR A FEW MINUTES TO SEE IF IT WARMS UP. (BE SURE TO GROUND THE INSIDE METAL PART OF THE HOUSING IN ORDER TO COMPLETE THE CIRCUIT.) WHEN INSTALLING ASSEMBLY WITH SPRING AND HEATER ELEMENT, CAREFULLY ROTATE ASSEMBLY COUNTERCLOCKWISE, BEING SURE THE HOOK ON COIL END ENGAGES WITH THE LEVER ON CHOKE SHAFT. CONTINUE ROTATING APPROXIMATELY 1/8 TURN MORE UNTIL INDEX MARKS ALIGN. THEN TIGHTEN SCREWS SECURELY.

INSTALLING

INSTALL IN REVERSE ORDER OF REMOVING, EXCEPT DO NOT INSTALL AIR CLEANER AT THIS TIME.

ADJUSTING TWIN CARBURETORS

RUN ENGINE UNTIL IT IS WARM. MAKE SURE THAT THE AUTOMATIC CHOKES ARE FULLY OPEN ON BOTH CARBURETORS AND THE THROTTLE VALVES ARE IN IDLE POSITION (IDLING CONTROL SCREWS OPEN BY ABOUT ONE TURN). THE VOLUME CONTROL SCREWS (6) OPEN 1 1/2 TURNS. CONNECT A TACHOMETER. DISCONNECT RIGHT HAND CONNECTION ROD AND WITH ENGINE RUNNING, MOVE IDLING CONTROL SCREW OF EACH CARBURETOR BY THE SAME AMOUNT UNTIL A SPEED OF 800-900 R.P.M. IS ATTAINED. SCREW IN VOLUME CONTROL SCREW (6) OF EACH CARBURETOR UNTIL THE ENGINE STARTS TO RUN IRREGULARLY. THEN BACK OFF SCREWS TO LEFT (1/4 TO 1/2 TURN) UNTIL ENGINE RUNS SMOOTHLY. INSTALL AIR CLEANER. DO NOT OVERTIGHTEN WING NUT. RECONNECT RIGHT HAND CONNECTING ROD.

INSTALLING

INSTALL IN REVERSE ORDER OF REMOVING.

SYNCHRONIZATION OF CARBURETORS

WARM UP ENGINE. DISCONNECT OPERATING ROD FOR THROTTLE VALVE SHAFT ON RIGHT CARBURETOR. PULL HOSE OFF RETARD CHAMBER OF VACUUM UNIT ON DISTRIBUTOR. PULL LEFT HOSE OFF AIR PUMP AND SEAL THE HOSE. DISCONNECT WIRE FROM TERMINAL OF CUT-OFF VALVE (1) ON CENTRAL IDLING SYSTEM. TURN VOLUME CONTROL SCREW (52) ON BOTH CARBURETORS IN AS FAR AS THEY WILL GO. DO NOT USE FORCE. THEN TURN OUT 2 1/2 TURNS. START ENGINE AND SET IDLING SPEED TO 500-700 RPM AND CO VALUE TO 3-5% BY TURNING BOTH VOLUME CONTROL SCREWS (52) UNIFORMLY. DISCONNECT IDLING CUT-OFF VALVE WIRE (2) ON ONE CARBURETOR AND NOTE THE DECREASE IN SPEED. THE DECREASE IN SPEED MUST BE THE SAME WHEN THIS PROCEDURE IS REPEATED ON THE OTHER CARBURETOR. OTHERWISE, THE MIXTURE MUST BE REGULATED BY ADJUSTING THE VOLUME CONTROL SCREWS (52). CONNECT OPERATING ROD FOR THROTTLE VALVE SHAFT, BEING CAREFUL NOT TO CHANGE THE POSITION OF THE THROTTLE VALVE. CONNECT WIRE TO TERMINAL OF CUT-OFF VALVE (1) ON CENTRAL IDLING SYSTEM AND INSTALL HOSES ON RETARD UNIT AND AIR PUMP. INCREASE SPEED BRIEFLY AND THEN SET IDLING WITH THE IDLING CONTROL SCREWS TO APPROXIMATELY 950 RPM.

IDLING ADJUSTMENT

CONNECT TACHOMETER. START ENGINE, AUTOMATIC CHOKE FULLY OPEN, SET IDLE SPEED BY TURNING THE BYPASS AIR SCREW (7) TO SPEED RANGE GIVEN IN THE FOLLOWING TABLE:

MANUAL TRANSMISSION	850- 900 RPM
AUTOMATIC TRANSMISSION	900-1,000 RPM

TURN CONTROL SCREW (9) OUT UNTIL ENGINE SPEED INCREASES. THEN TURN IN SLOWLY UNTIL ENGINE SPEED STARTS TO DROP; THEN TURN IT TO THE LEFT 1/2 TO 1 TURN UNTIL THE ENGINE RUNS SMOOTHLY. STARTING AT THIS POINT, TURN THE CONTROL SCREW (9) IN AGAIN UNTIL THE ENGINE SPEED DROPS APPROXIMATELY 20-30 RPM. IF BY WEAKENING THE MIXTURE IN THIS MANNER THE ENGINE NO LONGER RUNS EVENLY, THE SCREW MUST BE TURNED OUT AGAIN VERY SLIGHTLY UNTIL THE ENGINE CONTINUES TO RUN SMOOTHLY. CHECK AND MAKE SURE THAT THE ENGINE SPEED CORRESPONDS TO THE SPEED RANGE GIVEN IN THE TABLE.