

R. CONRADER COMPANY

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THE CONRADER BULL WHIP THROTTLE CONTROL

THE APPLICATION OF THE BULL WHIP THROTTLE CONTROL IS TO RETURN THE ENGINE TO IDLE SPEED WHEN THE COMPRESSOR IS RUNNING UNLOADED. THIS REDUCES NOISE, HEAT, FUEL CONSUMPTION, AND WEAR. THE BULL WHIP THROTTLE CONTROL MOUNTS TO ANY CONRADER RCB, RCL, RCS, OR RCF PILOT VALVE PLUS ALL B AND N SERIES PILOT OPERATED DISCHARGE LINE UNLOADERS.

THESE APPLICATIONS ARE ILLUSTRATED ON THE BACK OF THE BULL WHIP LITERATURE SHEET.

OPERATION:

WHEN THE AIR PRESSURE IN THE RECEIVER REACHES THE UNLOAD PRESSURE SETTING, THE PILOT VALVE OPENS AND SENDS AN AIR SIGNAL TO THE BULL WHIP AND THE COMPRESSOR INTAKE VALVE UNLOADERS, OR TO THE DISCHARGE LINE UNLOADER.

THIS ACTION;

A) HOLDS THE INTAKE UNLOADERS OR DISCHARGE LINE UNLOADER IN THE OPEN POSITION THEREBY UNLOADING THE COMPRESSOR, AND

B) RETURNS THE ENGINE LINKAGE TO THE IDLE POSITION, REDUCING THE ENGINE SPEED TO IDLE.

THE UNIT REMAINS IN THIS OPERATIONAL MODE (COMPRESSOR UNLOADED AND ENGINE AT IDLE SPEED) UNTIL THE AIR PRESSURE IN THE RECEIVER IS REDUCED TO THE LOAD PRESSURE SETTING OF THE PILOT. AT THIS POINT, THE PILOT CLOSES AND CUTS OFF THE AIR SUPPLY TO BOTH THE COMPRESSOR INTAKE UNLOADERS OR COMPRESSOR DISCHARGE LINE UNLOADERS AND THE BULL WHIP SO THE COMPRESSOR CAN RESUME IT'S NORMAL OPERATION (COMPRESSOR LOADED AND ENGINE AT FULL RPM)

STARTING THE UNIT WITH AIR PRESSURE IN THE RECEIVER:

BEFORE ATTEMPTING TO START AN ENGINE POWERED COMPRESSOR WITH A PRESSURIZED RECEIVER, THE COMPRESSOR SHOULD FIRST BE UNLOADED. THIS ACCOMPLISHED BY SETTING THE MANUAL PILOT UNLOADER HANDLE TO THE UNLOAD POSITION BEFORE CRANKING THE ENGINE. AS SOON AS THE ENGINE IS STARTED AND RUNNING, RE-SET THE PILOT FOR AUTOMATIC OPERATION SO THE ENGINE CAN REACH NORMAL SPEED.

INSTALLATION:

MOUNTING THE BULL WHIP THROTTLE CONTROL WILL DIFFER SLIGHTLY ACCORDING TO EACH ENGINE AND COMPRESSOR DESIGN. HOWEVER, THE FOLLOWING INSTRUCTIONS WILL GENERALLY APPLY.

1) THE BULL WHIP CAN MOST OFTEN BE SUB-ASSEMBLED DIRECTLY TO EITHER THE PILOT VALVE OR DISCHARGE LINE UNLOADER, AND THEN SIMPLY THREAD THE ASSEMBLY INTO THE RECEIVER.

2) THE "Z" END WIRE OF THE BULL WHIP IS THEN INSERTED INTO THE PROPER EYELET OF THE CARBURETOR THROTTLE LINKAGE.

3) THEN SECURE THE "Z" END CABLE COVER TO THE CARBURETOR LINKAGE MOUNTING BRACKET WITH THE CABLE CLAMP SUPPLIED WITH THE ENGINE. (CAUTION:DO NOT OVER TIGHTEN THIS CLAMP! DOING SO WILL RESTRICT THE THROTTLE CONTROL MOVEMENT)

4) USING THE CABLE STRAP SUPPLIED WITH THE BULL WHIP, ATTACH THE CABLE CENTER LOOP TO THE ENGINE SHROUD.

SETTING AND ADJUSTMENT:

1) LOOSEN THE CABLE CLAMP ON THE CARBURETOR LINKAGE MOUNTING BRACKET SECURING THE BULL WHIP.

2) START AND RUN THE UNIT, ADJUSTING THE ENGINE RPM TO OBTAIN THE DESIRED UNIT PERFORMANCE. WHEN THE PILOT REACHES THE UNLOAD POINT THEREBY ACTIVATING THE COMPRESSOR UNLOADING DEVICE AND THE BULL WHIP THROTTLE CONTROL, SLIDE THE CABLE COVER FORWARD TO ALLOW THE THROTTLE ARM TO ENGAGE THE IDLE STOP.

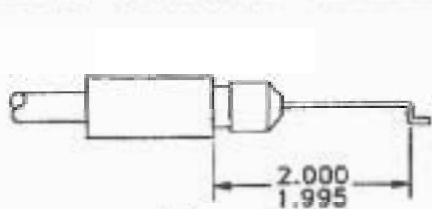
3) RE-TIGHTEN THE CABLE CLAMP (AGAIN BEING CAREFUL NOT TO RESTRICT THE CABLE MOVEMENT.

4) CYCLE THE UNIT SEVERAL TIMES USING THE PILOT VALVE HAND UNLOADER TO INSURE REPEATED SATISFACTORY OPERATION.

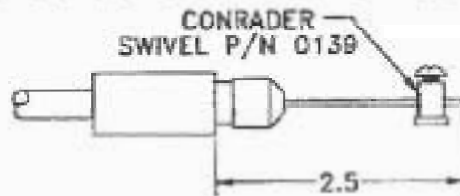
SERVICE:

THE CONRADER BULL WHIP THROTTLE CONTROL IS DESIGNED AND MANUFACTURED TO PROVIDE TROUBLE FREE ,LONG LIFE SERVICE .

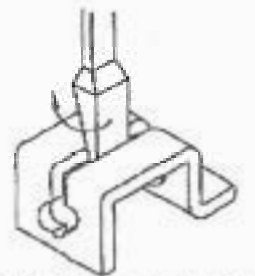
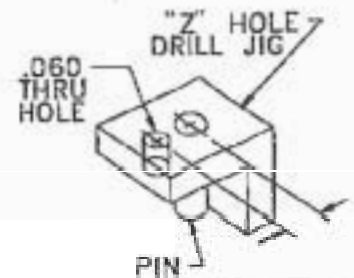
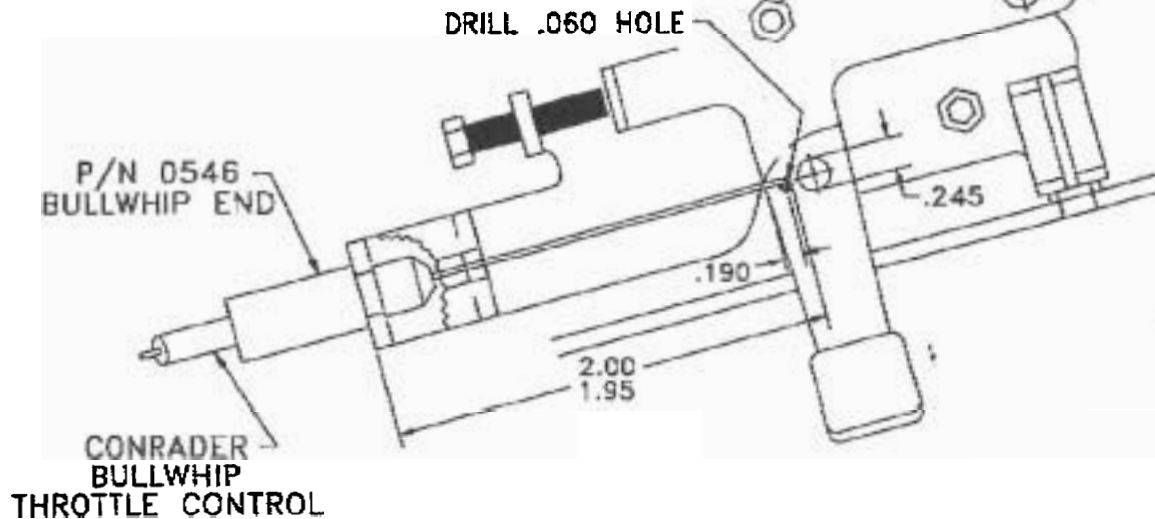
PROVIDED THAT THE PILOT ACTUATOR AND COMPRESSOR ARE MAINTAINED IN GOOD WORKING ORDER.



(A) OPTION
SOLID WIRE WITH "Z" END

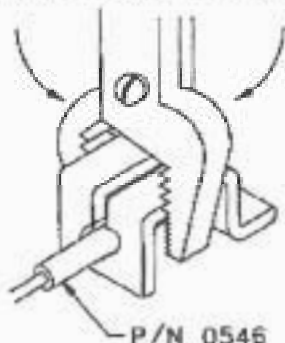


(B) OPTION
BRAIDED WIRE WITH SWIVEL END

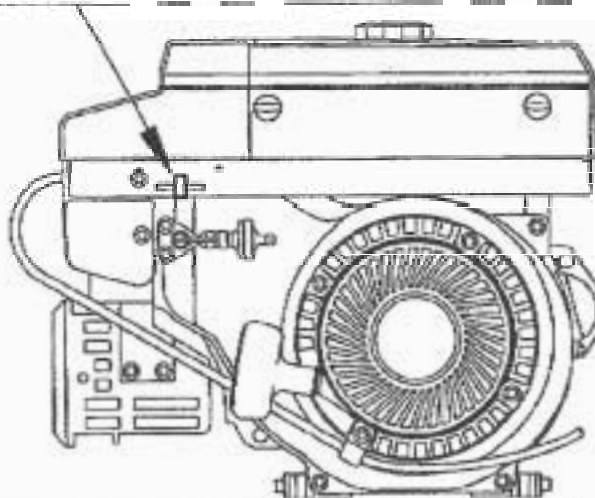


SPREAD CLAMP TO
INSTALL BULLWHIP
THROTTLE CONTROL

PINCH CLAMP CLOSED



P/N 0546
BULLWHIP
CABLE END



**CONRADER
VALVES**

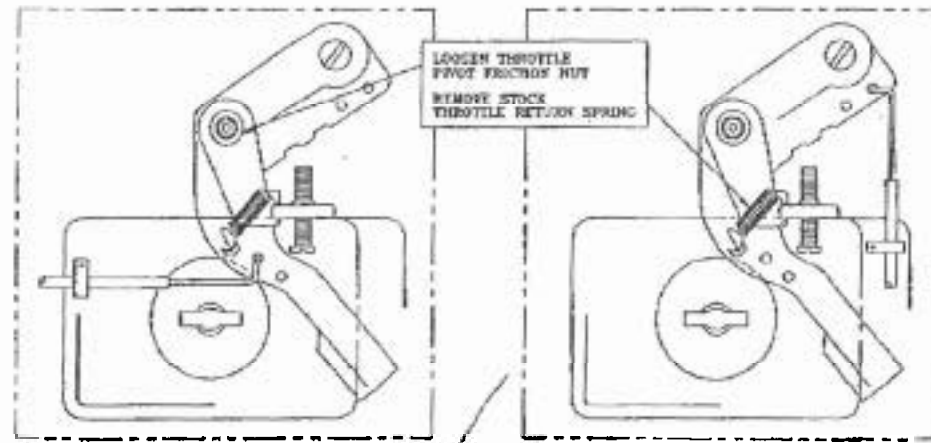
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BULLWHIP THROTTLE CONTROL
INSTALLATION INSTRUCTIONS
FOR BRIGGS & STRATTON
VANGUARD 5 THRU 9 HP



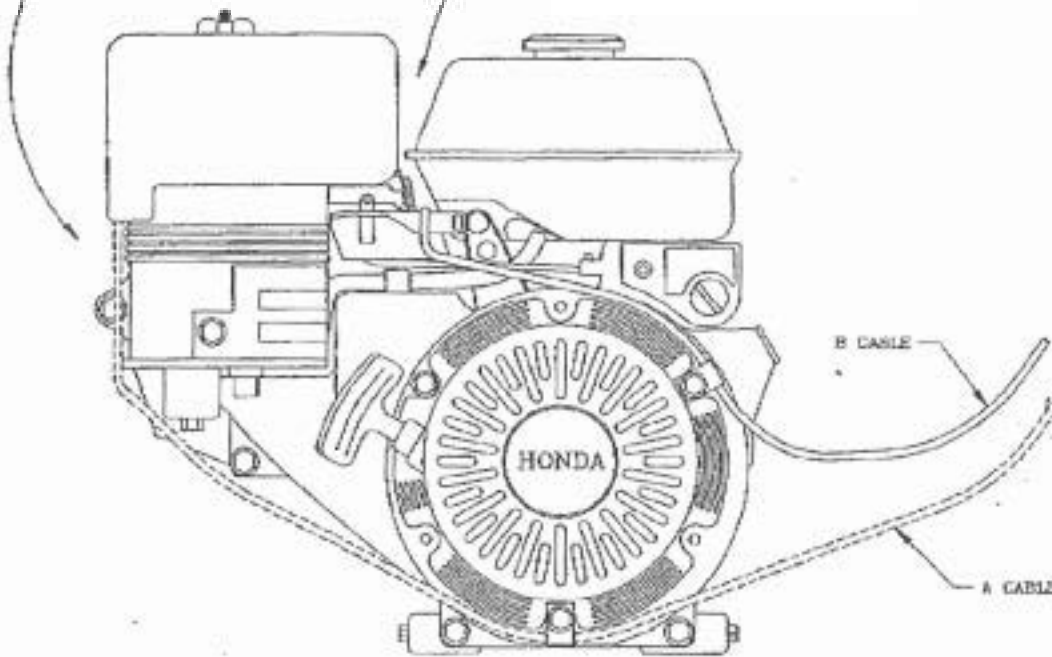
CONRADER
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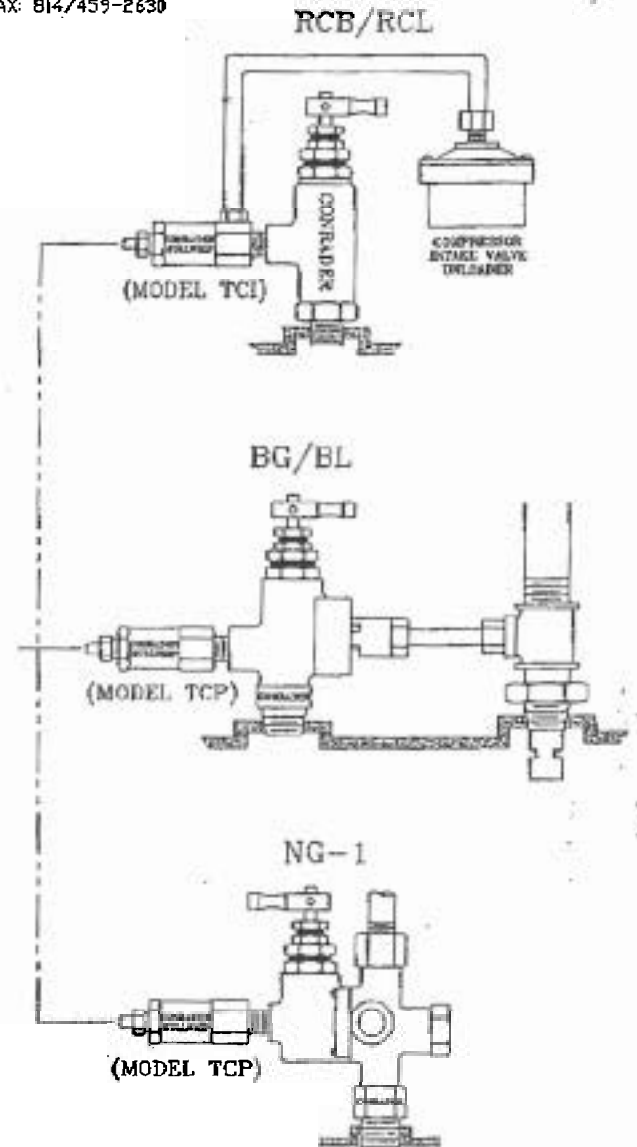


TOP VIEW EXAMPLE A

TOP VIEW EXAMPLE B




CONRADER BULLWHIP THROTTLE CONTROL
MOUNTING DIAGRAM FOR HONDA ENGINE
POWERED COMPRESSOR UNITS WITH
RCB-RCL-BG-BL OR N SERIES VALVES



REVISION DATE

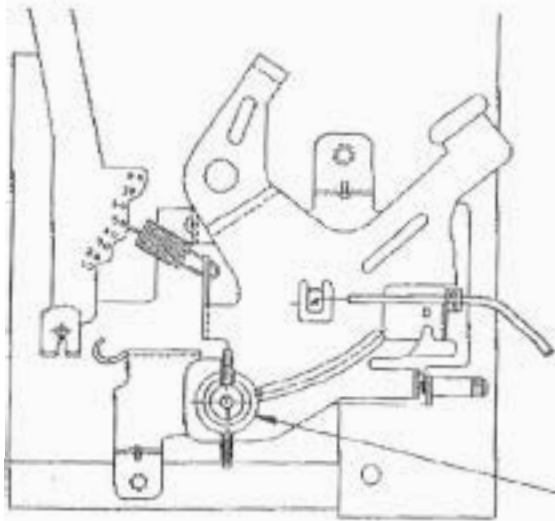
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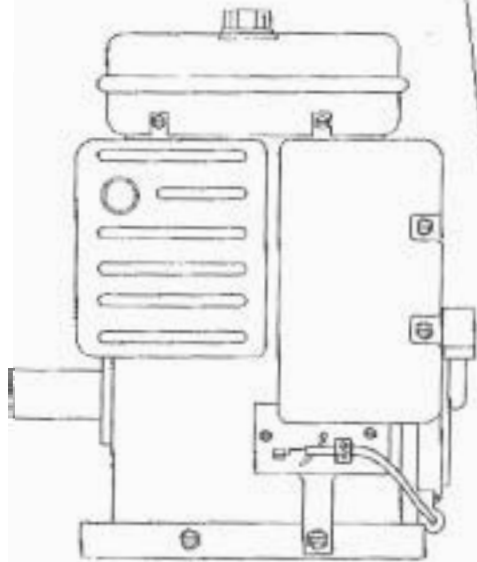

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CONRADER BULLWHIP THROTTLE CONTROL MOUNTING DIAGRAM FOR BRIGGS & STRATTON "INDUSTRIAL PLUS" 5-H.P. ENGINE POWERED COMPRESSORS UNITS WITH, RCB, RCL, BG, BL OR N-SERIES VALVES

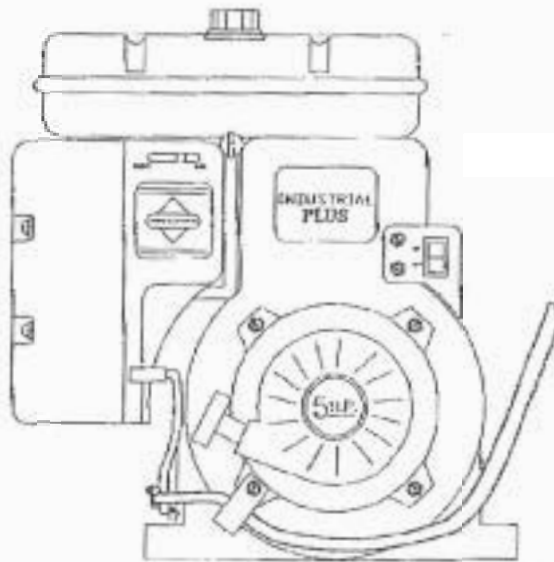
LOOSEN THROTTLE FRICTION NUT



SIDE VIEW

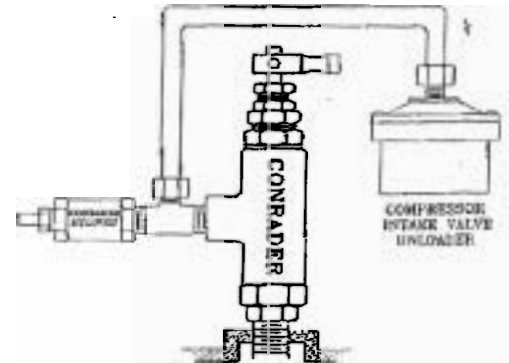


SIDE VIEW

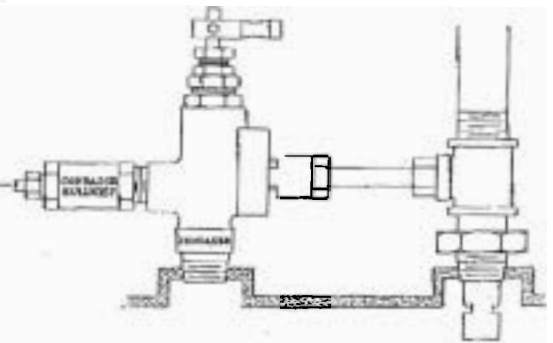


FRONT VIEW

RCB / RCL



BG / BL



NG-1

