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 RC1, RCL, RCS, OR RCFL 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.

IF YOU HAVE ANY QUESTIONS REGARDING THE ASSEMBLY OR ADJUSTMENT OF THE BULL WHIP OR ANY OTHER CONRADER VALVE PLEASE CALL 1-814-452-4533 OR FAX 1-814-452-2659.
CONRADER BULLWHIP THROTTLE CONTROL
MOUNTING DIAGRAM FOR HONDA ENGINE
POWERED COMPRESSOR UNITS WITH
RCB-RCL-BG-BL OR N SERIES VALVES
R. CONRADER VALVE CO.
1319 SASSAFRAS STREET
P.O. BOX 924
ERIE, PA. 16512
PH. (814)452-4631
FAX (814)459-2630

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

LOosen THROTTLE FIRCTION NUT

SIDE VIEW
FRONT VIEW