



REPAIR KIT RKD1-20-3 & RKD1-20-3B FOR 600 DIAPHRAGM INSTRUCTIONS

Important: Any maintenance, service or repair should be performed by trained and experienced service technicians. Proper tools and equipment should be used to prevent injury to the servicing technician, property or system components. Service repairs should always be performed in a safe environment and the technician should always wear protective clothing to prevent injury.

The IMPCO PPI-124 repair kit instructions will provide the technician information to successfully repair the 600 Mixer/Carburetor. Always inspect the major casting pieces for damage, corrosion or cracks before attempting a service repair. Be sure the repair kit part number you are using is correct for the carburetor being serviced.



Repair Kit, P/N RKD1-20-3 with fluorosilicone diaphragm, plate and bushing preassembled, plus 4 screws. RKD1-20-3B is identical, but also includes a lower bushing.

Repair Kit & Related Parts

Item	Part Number	Description	Repair Kit Qty
1	B3-59	Bushing,A/V Upper 600Vf3	1
2	D1-20-3	Diaphragm, Mixer Fvmq 600 Ser	1
3	P2-61-2	Plate-Diaphragm	1
4	S1-12	SCREW,PAN HD,8-32 x 5/16 L	4
5	B3-60	Bushing,A/V Lower 600Vf3	1*
6	S1-3	Screw 10-24x5/8	-
7	NSS	Body	-
8	NSS	Air Valve	-
9	C1-32	Cover	-
10	Varies	Spring	-

**Included in repair kit RK-D1-20-3B Only*



INSTRUCTIONS:



- 1) Remove screws (6), cover (9), and spring (10). Retain all of these items.



- 2) Remove diaphragm and air valve assembly (Items 1-4) from the body. Remove the four screws (4) and diaphragm (2) from the air valve (8) and discard screws (4) and diaphragm (2).



- 3) Inspect the body (7), cover (9) and air valve (8) for damage and clean as necessary using a safety solvent.

NOTE: Inspect the guide boss (shown by arrow at left on the underside of the cover). Any unusual wear or damage may affect performance and prematurely wear down the upper bushing in the diaphragm assembly.



4) **RKD1-20-3B ONLY** Push the lower bushing (5) out of the body (7), then press in the new bushing (5), ensuring its lip is fully seated against the body (7) as shown by the arrow at left.



5) Place new diaphragm (2) on top of air valve (8) and align screw holes in the plate (3) and air valve (8). Seat the larger end of the upper bushing (1) into the bore of the air valve.



6) Align holes in the plate (3) and diaphragm (2) assembly and insert screws (4). Finger tighten all four screws (4), then torque to 7-10 in-lbs./0.8-1.1 Nm. Do not flatten the star lock washers.



7) Place the diaphragm (2) and air valve (8) assembly into the body (7) and align screw holes on the perimeter of the diaphragm (2). Insert spring (10).



8) Place cover (9) on top of the diaphragm (2), align holes. Insert screws (6) and finger tighten. Insert fingers under the cover (9) and manually press the diaphragm (2) upward to ensure the air valve assembly easily travels up and down. Torque the screws (6) securing the cover (9) in a criss-cross pattern to 15-20 in-lbs./1.7-2.3 Nm.

WARNING:

IMPROPER INSTALLATION OR USE OF THIS PRODUCT MAY CAUSE SERIOUS INJURY AND/OR PROPERTY DAMAGE.

SERVICE TECHNICIANS AND USERS

SHOULD CAREFULLY READ AND ABIDE BY THE PROVISIONS SET FORTH IN NATIONAL FIRE PROTECTION ASSOCIATION PAMPHLET #37 FOR STATIONARY ENGINES, #52 FOR CNG VEHICULAR FUEL SYSTEMS OR #58 FOR LPG SYSTEMS.

INSTALLERS

LPG INSTALLATIONS IN THE UNITED STATES MUST BE DONE IN ACCORDANCE WITH FEDERAL STATE OR LOCAL LAW, WHICHEVER IS APPLICABLE AND NATIONAL FIRE PROTECTION ASSOCIATION PAMPHLET #58, STANDARD FOR STORAGE AND HANDLING OF LIQUEFIED PETROLEUM GASES TO THE EXTENT THESE STANDARDS ARE NOT IN VIOLATION WITH FEDERAL, STATE OR LOCAL LAW.

IN CANADA

REFER TO CAN/CGA PROPANE INSTALLATION CODES.

CNG INSTALLATIONS IN THE UNITED STATES

MUST BE DONE IN ACCORDANCE WITH FEDERAL STATE OR LOCAL LAW AND NATIONAL FIRE PROTECTION ASSOCIATION PAMPHLET #52, COMPRESSED NATURAL GAS (CNG) VEHICULAR FUEL SYSTEMS TO THE EXTENT THESE STANDARDS ARE NOT IN VIOLATION WITH FEDERAL, STATE OR LOCAL LAW.

IN CANADA

REFER TO CAN/CGA CNG INSTALLATION CODES.

LPG AND/OR NATURAL GAS INSTALLATIONS ON STATIONARY ENGINES

MUST BE DONE IN ACCORDANCE WITH FEDERAL, STATE OR LOCAL LAW AND NATIONAL FIRE PROTECTION ASSOCIATION PAMPHLET #37, STATIONARY COMBUSTION ENGINES AND GAS TURBINE ENGINES, TO THE EXTENT THESE STANDARDS ARE NOT IN VIOLATION WITH FEDERAL, STATE OR LOCAL LAW. FAILURE TO ABIDE BY THE ABOVE WILL VOID ANY IMPCO WARRANTY ON THE PRODUCTS AND MAY CAUSE SERIOUS INJURY OR PROPERTY DAMAGE.

DUE TO THE INHERENT DANGER OF GASEOUS FUELS THE IMPCO PRODUCTS SHOULD NOT BE INSTALLED OR USED BY PERSONS NOT KNOWLEDGEABLE OF THE HAZARDS ASSOCIATED WITH THE USE OF GASEOUS FUELS.