

# **INSTRUCTION BULLETIN**

No. 9012598

Machine: M20 / T20 /

M30

Published: 02-2015

Rev. 00

NOTE: DO NOT DISCARD the Parts List from the Instruction Bulletin. Place the Parts List in the appropriate place in the machine manual for future reference. Retaining the Parts List will make it easier to reorder individual parts and will save the cost of ordering an entire kit.

NOTE: Numbers in parenthesis () are reference numbers for parts listed in Bill of Materials.

Installation instructions for kit number 9012597

### SYNOPSIS:

This kit contains the parts needed to replace the exhaust tube and heat shield on M20 / M30 / T20 Gas / LPG machines equipped with GM engines.

Please follow step-by-step instructions.

# SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 2 hours)



# PROTECT THE ENVIRONMENT

Please dispose of packaging materials, used machine components such as batteries and fluids in an environmentally safe way according to local waste disposal regulations.

Always remember to recycle.

# PREPARATION:

FOR SAFETY: Before leaving or servicing machine, stop on level surface, turn off machine, set parking brake, and remove key.

1. Allow the engine / exhaust system to cool. **Do** Not touch hot engine / exhaust system components.



WARNING: Burn hazard. Hot surface. Do NOT touch.

FOR SAFETY: When servicing machine, allow engine to cool.

2. Jack up the front end of the machine, place jack stands under the machine, and lower the machine onto the jack stands. Refer to MAINTENANCE section of Operators Manual for instructions how to safely jack up the machine and additional safety information.

FOR SAFETY: When servicing machine, block machine tires before jacking machine up. Use a hoist or jack that will support the weight of the machine. Jack machine up at designated locations only. Support machine with jack stands.

3. Remove the skirt from between the engine and the frame of the machine. Set the skirt and all hardware aside. (Fig. 1)

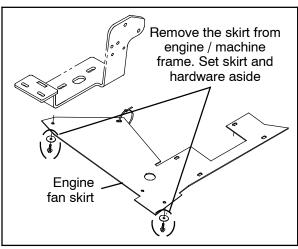


FIG. 1

## **INSTALLATION:**

- 1. Disconnect the oxygen sensor from the exhaust pipe. (Fig. 2)
- 2. Remove the existing exhaust pipe and heat shield from the machine. (Fig. 2)

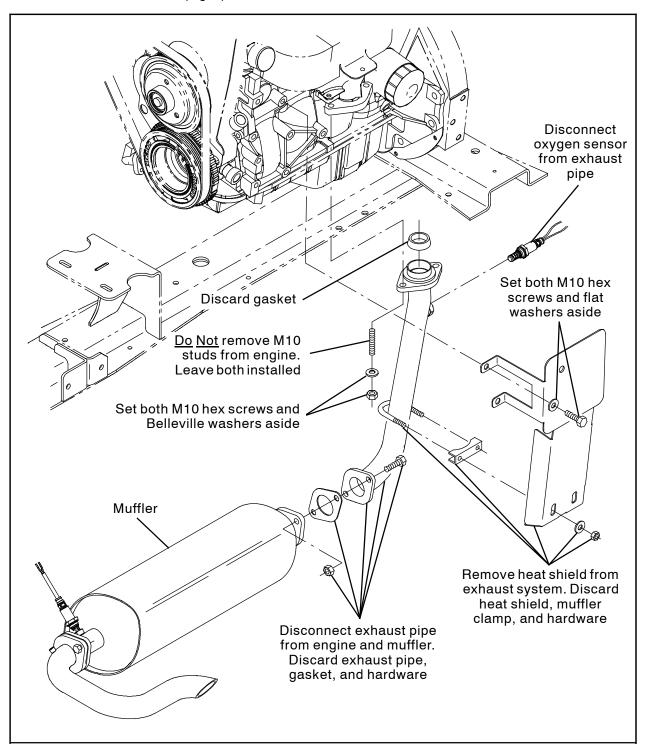


FIG. 2

3. Drill a 11/32 in. (222.25 mm) hole into the frame of the machine. (Fig. 3)

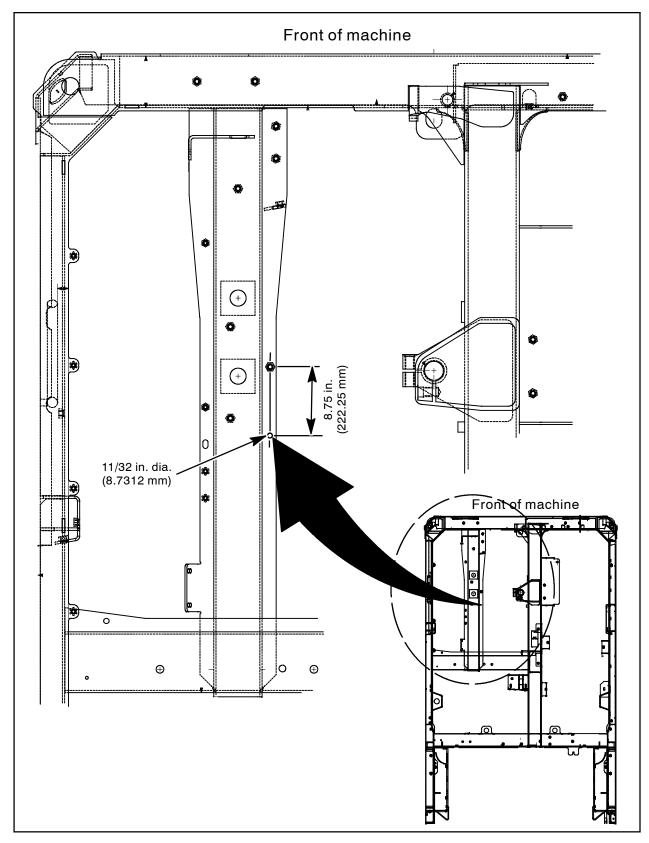


FIG. 3

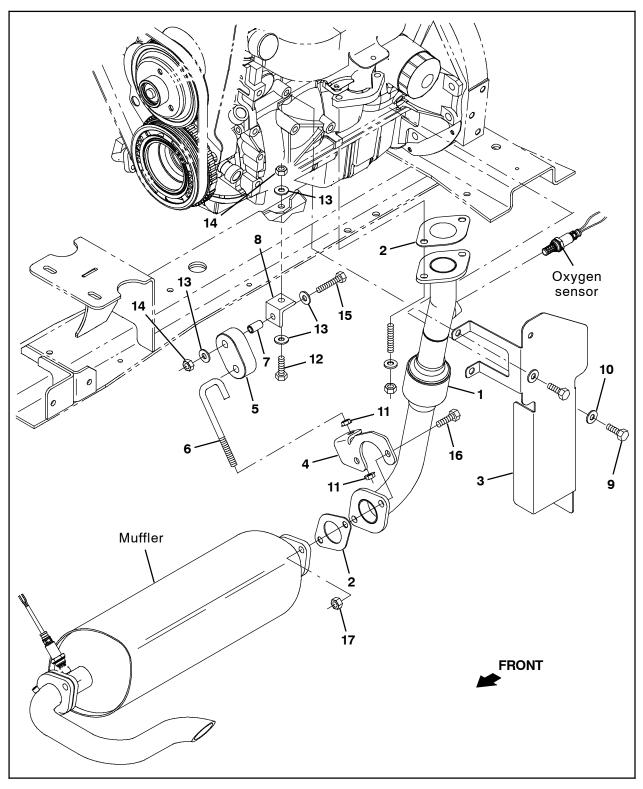


FIG. 4

- 4. Place one gasket (2) onto the new exhaust tube (1) and use saved hardware to connect the exhaust tube to the engine. (Fig. 4)
- 5. Use two flange nuts (11) to install the hanger (6) onto the muffler mounting bracket (4). Do not completely tighten the flange nuts. The flange nuts are tightened during final adjustment. (Fig. 4)

- 6. Use one M8 hex screw (12), two flat washers (13), and one M8 hex lock hex nut (14) to install the mounting angle (8) onto the frame of the machine. (Fig. 4)
- Use one M8 hex screw (15), two flat washers (13), one sleeve (7), and one M8 hex lock hex nut (14) to install the rubber isolator (5) onto the mounting angle (8). (Fig. 4)
- 8. Install the hanger (6) into the rubber isolator (5). (Fig. 4)
- Adjust the hanger (6) in the muffler mounting bracket (4) for the height where the exhaust tube (1) will be installed onto the muffler. (Fig. 4)
- Place the remaining gasket (2) between the exhaust tube (1) and muffler and use two M10 hex screws (16) and two M10 hex nuts (17) to connect the exhaust tube and muffler mounting bracket (4) to the muffler. (Fig. 4)

- Check adjustment of hanger (6) in the muffler mounting bracket (4) and make necessary adjustments. Tighten the flange nuts (11). (Fig. 4)
- 12. Connect the oxygen sensor to the exhaust tube (1). (Fig. 4)
- 13. Use saved hardware and one M8 hex screw and one flat washer (10) to install the heat shield (3) over the exhaust tube (1) and onto the engine. (Fig. 4)
- 14. Reinstall the skirt between the engine and the frame of the machine.
- Lift the machine from the jack stands, remove the jack stands from under the machine, and lower the machine to the floor.
- Start and test the machine. Observe the area around the exhaust tube and muffler for exhaust leaks.

# Bill Of Materials For Pipe Kit, Exhaust, Replmt [M20,T20,M30] - 9012597

		Tennant		
	Ref.	Part No.	Description	Qty.
$\triangle$		9012597	Pipe Kit, Exhaust, Replmt [M20,T20,M30]	1
•	1	1073731	Tube Wldt, Exhaust, 1.6D, 2 Hole Flng	1
•	2	1011216	Gasket, Exhaust, .07, 1.63ID, 2/3.4BC	2
•	3	1073180	Shield, Heat	1
<b>A</b>	4	1073657	Bracket, Mtg, Muffler [M20/T20 2007]	1
<b>A</b>	5	1013031	Isolator, Rbr	1
•	6	1013117	Rod, Hanger, Isolator	1
•	7	222496	Sleeve, P/M, 0.32B 0.50D 0.9L [430SS]	1
•	8	76904	Angle, Mtg, Stl, .19 1.3 1.3 01.0L 1Hole	1
•	9	16735	Screw, Hex, M8 X 1.25 X 16, 8.8	1
<b>A</b>	10	32490	Washer, Flat, 0.25, Std	1
•	11	27980	Nut, Hex, Flng, .38-16	2
•	12	09740	Screw, Hex, M8 X 1.25 X 20, SS	1
•	13	01685	Washer, Flat, 0.38B 0.88D .08, SS	4
•	14	08713	Nut, Hex, Lock, M8 X 1.25, NL, SS	2
<b>A</b>	15	222505	Screw, Hex, M8 X 1.25 X 45, SS	1
<b>A</b>	16	39285	Screw, Hex, M10 X 1.50 X 40, 8.8	2
<b>A</b>	17	08166	Nut, Hex, Stover, M10 X 1.50	2

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