## Version 2.1, 5/16/2016

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[Web-Based Repair Request Form](https://system.netsuite.com/app/common/custom/custrecordentry.nl?rectype=135&id=62)

Form captures customer and equipment details.

* Customer
  + Name
  + Company Name
  + Address
  + Phone
  + Email
  + Customer Drop-Off, Request Pickup/Delivery, On-Site Repair
* Equipment (allow multiple lines for multiple serial numbers)
  + Serial Number
  + Make/Model of Car
  + Description of Problem

If customer requests Pickup/Delivery or On-Site Repair, form must calculate if address is within deliver/pickup zone (30 mile radius) for MFGC.  Form will provide instructions to call for pickup or onsite repair if address is outside of the delivery/pickup zone.  Form will also detail any service fees/diagnostic charges applicable to all repair requests.

Form submits to SuiteLet which builds Service Request and Equipment records creates associations, sends confirmation email to customer.

Use Email Template for email where possible.

[Will Call Back Status Alert](https://system.netsuite.com/app/common/custom/custrecordentry.nl?rectype=135&id=63)

If Service Request prospect's last status is “WILL CALL BACK”, this will trigger an MFGC employee to follow-up after set number of days.  This variable can be set and maintained by MFGC.  
  
MFGC then reaches out to prospect for problem discovery and converts prospect to customer. If prospect is a pre existing customer in system prospect is manually merged with existing customer record.  
  
This is a saved search for a dashboard or scheduled email alert.

[Service Request afterSubmit](https://system.netsuite.com/app/common/custom/custrecordentry.nl?rectype=135&id=64)

Submission of form creates Service Request record in default 'Awaiting Possession' status.

* If customer exists, associate request to customer, otherwise create prospect record and associate Request to new record.
* If Equipment record exists, associate request to Equipment.  Otherwise create Equipment record and associate Request to new record.
* Create Shell Estimate transaction record.
  + Lines pre-populated for Service Fee, Diagnostic Fee, Labor Charge

afterSubmit on Edit

If status is going from 'Awaiting Possession' to 'Received', create Service Work record.

[Service Radius Utility Suitelet](https://system.netsuite.com/app/common/custom/custrecordentry.nl?rectype=135&id=65)

Suiltelet which receives a zip code and uses MapQuest to validate if zip is within a determined radius.

* Use Company Level script parameter to set miles on radius
* See ProBox for similar implementation in dispatch module.
* Returns boolean.

[Internal Repair Request Form](https://system.netsuite.com/app/common/custom/custrecordentry.nl?rectype=135&id=66)

Form captures customer and equipment details.

* Customer
  + Name
  + Company Name
  + Address
  + Phone
  + Email
  + Customer Drop-Off, Request Pickup/Delivery, On-Site Repair
* Equipment (allow multiple lines for multiple serial numbers)
  + Serial Number
  + Make/Model of Car
  + Description of Problem

If customer requests Pickup/Delivery or On-Site Repair, form calls out to[Service Radius Utility Suitelet (Arch Item #65)Service Radius Utility Suitelet (Arch Item #65)](https://system.netsuite.com/app/common/custom/custrecordentry.nl?rectype=135&id=65" \t "_blank) to calculate if address is within deliver/pickup zone (30 mile radius) for MFGC.  Form will provide instructions to call for pickup or onsite repair if address is outside of the delivery/pickup zone.  Form will also detail any service fees/diagnostic charges applicable to all repair requests.

Upon submission, afterSubmit creates Work Performed record, validates existence of customer/equipment records, creates shell Estimate.  See[Arch Item #64Arch Item #64](https://system.netsuite.com/app/common/custom/custrecordentry.nl?rectype=135&id=64" \t "_blank)

Use Email Template for email where possible.

[Estimate Rejected](https://system.netsuite.com/app/common/custom/custrecordentry.nl?rectype=135&id=67&e=T&pf=CUSTRECORD_ARCHITECTUREITEM_PARENT&pi=140&pr=48)

If customer does not accept estimate, user will click 'Reject' button on Estimate.  Script will transform Estimate into Sales Order and bill customer for diagnostics fee and mark Service Request status as 'Cancelled'.  
  
beforeSubmit: Add 'Reject' button to Estimate Form  
afterSubmit: nlapiTransformRecord('estimate', id, 'salesorder');

Use Company Level script parameter to associate Diagnostics Fee item for use on SO  
Loop through line items and clear out all items.  Add in Diagnostics Fee item.  
Set Service Request Status.

**Development Notes 5/14/2016:**

* Button to reject an estimate only appears if the estimate is not processed. A user could delete any processed transactions which will open the estimate up for rejection.
* The status on the estimate is not flagged as “Rejected” or anything similar, it simply gets changed to processed. This could be done, if needed.
* Currently billing for ***one*** diagnostic fee, regardless of how many pieces of equipment were referenced on the Quote. ***Should it increase the quantity of the diagnostic charge depending on how many pieces of equipment?***
* When the diagnostic fee sales order is saved (in the UI, not perfomring the transform behind the scenes) each piece of equipment’s status is updated to read as “rejected”. ***This is different than noted in architectural document, but implemented this way as Status is at the line-level and to allow for MFGC to reject individual pieces of equipment for repair but to be able to process other pieces on the same service request***

[Service Work Actions](https://system.netsuite.com/app/common/custom/custrecordentry.nl?rectype=135&id=68)

Upon receipt of Equipment, userEvent on save of Service Request will create Service Work Record.

* Service Work record is where tech captures hours estimates and parts to be used.
* Service Parts sub-record is used for tech to select items for repair and their quantities.
  + Tech should add a Service Part for the labor estimate.  Select Labor item record, designate qty as hours for repair.

Upon save of Service Work record, when tech marks 'Diagnostic Complete'

* afterSubmit creates Shell Estimate for customer using Service Parts from Service Work record.
* Script alerts Sales Rep about estimate
  + Sells rep then communicates Estimate to customer.
* If customer is 'Rental Fleet' (i.e. internal repair) estimate rates set to $0.
  + Estimate alert for internal repairs goes to MFGC Fleet Manager

[Estimate Accepted](https://system.netsuite.com/app/common/custom/custrecordentry.nl?rectype=135&id=69)

When customer accepts estimate, sales rep will click 'Convert' on Estimate Record.  Script will transform to Sales Order, set status of Service Work to 'Pending Repair' and Service Request to 'In Progress'.  
  
beforeLoad: add 'Convert' button to Estimate  
afterSubmit: transform to Sales Order, update Service Request and Service Work records, alert tech to proceed with repair.

[Additional Time/Labor for Repair (Change Request)](https://system.netsuite.com/app/common/custom/custrecordentry.nl?rectype=135&id=70)

If tech determines more labor or parts are needed, tech will add Service Part to Service Work record, marks Service Parts as 'Change Order' and sets Service Work status to 'Request Estimate Refresh'  
  
afterSubmit; creates CRM task to notify Sales Rep of additional parts/labor needed.  Use new Service Parts marked for 'change order' in body of message.  
  
Sales Rep would then manually review, reach out to customer, then update the Sales Order or create a new supplementary estimate for additional labor/parts.  
  
If customer accepts new estimate Sales Rep responds to CRM task to inform tech to proceed with additional work.

**Development Notes 5/15/2016:**

* Created custom record (SRV Parts / Labor), sublist on Service Work and Service Request
* Button to create Estimate/Sales Order present on Service Request if parts have not been placed on a transaction
* User is able to push button when creating/editing Estimate/Sales Order related to a Service Request to add parts/labor that has not been set on a transaction
  + Note: parts/labor not able to be set if it has been flagged as a Change Order and the Change Order is not approved
* Button on transaction will not duplicate items if pressed twice (removes lines set previously, but does not set lines set previous that were committed with a Save)
* If user transitions to an Estimate/Sales Order where Service Work is not being appended (i.e. empty sublist on load) the user will receive an alert instructing them to push the parts/labor button
* Creates CRM Task when user saves custom-record when it is flagged as a Change Order
  + Assigns to Sales Rep if one exists, if one does not exist it assigns it to the technician to manually assign elsewhere
  + Email is sent, [example email here](https://system.na1.netsuite.com/core/media/media.nl?id=20&c=TSTDRV1495421&h=d4a82056d0b4448c6c8a&_xt=.pdf)
* ***TO-DO*** – Send email to Technician when the Change Order is approved
  + ***QUESTION***: ***Should the status on the Service Work be changed to “Change Order Request Pending” or similar, which would be updated once approved? If the Task is not approved, should the Sales Rep mark it as such on the Task which will then Cancel that Service Work.***
    - ***If the Service Work is present on a Transaction (and not fulfilled) should the line be closed?***

[Repair is Complete](https://system.netsuite.com/app/common/custom/custrecordentry.nl?rectype=135&id=71)

When tech is finished with repair, marks Service Work record status 'Repair Complete'.  
  
afterSubmit: sets custom checkbox on Sales Order marking order 'Ready to Fulfill'.  Creates CRM event for Sales Rep or Service Manager informing of completion and to prepare for customer pickup/delivery.  
  
Saved Search: list of orders ready to fulfill so Sale Rep can inform customer and work out payment.  
  
If further work needs to be done, Sales Rep would manually uncheck box on Sales Order, tech manually changes status back to 'In Progress' on Service Work.

[Customer Pickup](https://system.netsuite.com/app/common/custom/custrecordentry.nl?rectype=135&id=72)

When customer is ready to pick up car or on-site is ready to bill or car is ready to be delivered:  
  
Sales Order is manually fulfilled.  
afterSubmit of Item Fulfillment: mark Service Request, Service Work 'Complete'  
  
Sales Order is manually billed and payment collected.

[Awaiting Parts](https://system.netsuite.com/app/common/custom/custrecordentry.nl?rectype=135&id=73)

If sales order is created for an item and accepted by the customer, and parts are required to be ordered, upon creation of Purchase Order, Service Request will be set to status 'Awaiting Parts'.  When parts are received, script will check against all open POs for Service Request for item and mark Service Request 'Awaiting Repair' if all parts are received.  
  
Custom Transaction Body field on Estimate, Sales Order, Purchase Order, Transfer Order, Item Receipt that references Service Request.  
  
Purchase Order or Transfer Order afterSubmit on create:  Mark Service Request record 'Awaiting Parts'  
  
Item Receipt afterSubmit on create: perform search for any open POs for this Service Request.  If no open POs exist, mark Service Request record 'Awaiting Repair'.

[Maintenance Schedule](https://system.netsuite.com/app/common/custom/custrecordentry.nl?rectype=135&id=74)

Use Maintenance Fields on Fixed Asset record that identifies months between Maintenance. (i.e. 24)  
  
Scheduled script runs to look for all Fixed Asset records where maintenance is due.  Creates Service Request and Service Work records which adds into service queue.  Technician runs through standard repair process.  
  
Dashboard search shows vehicles needed Maintenance with highlighting on passed-due.